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ABSTRACTS OF
THE 49th SRI LANKA SURGICAL CONGRESS - 2020
OF
THE COLLEGE OF SURGEONS OF SRI LANKA
JOINT INTERNATIONAL CONFERENCE WITH
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The Council of the College of Surgeons of Sri Lanka and the Editorial Board of the Sri Lanka Journal of Surgery wish to acknowledge the following individuals who contributed immensely in the review process and the preparation of this supplement. The time and effort put in by them has made this task possible.

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ABSTRACTS

ORAL PRESENTATIONS

OP 04 - Experience on ERAS in Colorectal surgery in a District General Hospital in UK

**Sumudu Jayasinghe, A Kawesha, P Stonelake, R Patel,
O Oluwajobi, P Waterland
National Hospital, Sri Lanka**

Introduction

We follow enhanced recovery pathway for Laparoscopic colorectal Resections in Russells Hall Hospital, Dudley, UK. It has numerous advantages both to the patient and to the NHS. In literature it is well documented that it reduces the hospital stay without causing excessive morbidity & mortality for patients.

Methodology

We have retrospectively analysed patients who have undergone elective Laparoscopic colorectal resections for cancer and benign diseases from September 2016 to September 2017. Patients discharged early and if any patient has stayed for more than 5 days then their reason for stay is defined.

Results

61 patients underwent laparoscopic colectomies. Out of 61, 40 (65.5%) were males, 21 (34%) were females. Their mean age was 70.55 years.

Altogether 35 patients were discharged by day 5 (59.01%). 25 patients were discharged after day 5, and out of that 8 patients were discharged on day 6.

5 patients had medical complications following surgery. 9 patients had surgical complications. 2 Anastomotic Leakages (3.27%). 2 Failed TWOCS, Post operative Ileus, Acute Kidney injury, parastomal hernia. There were 3 readmissions. 2 patients had reoperations for refashioning of stoma and for the anastomotic stricture.

There were No Mortalities.

Discussion and Conclusion

According to the study results, 59.01% patients were discharged home on or before day 5. In addition the Morbidity and Mortality for the patients are not excessive compared to conventional colorectal surgery. Overall ERAS helps to discharge patients home early without excessive Morbidity and Mortality to the patients.

OP 16 - Psychological wellbeing in patients with inflammatory bowel disease in a tertiary care hospital in Sri Lanka

Umesh Jayarajah, Metthananda Nawarathne, Rishdha Riza, Reshana Dimithri, Tharindu Rathnayake, Ishan De Zoysa, Suranjith L Seneviratne

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Introduction

Inflammatory bowel diseases (IBD) are chronic disorders needing long term treatment and have considerable impact in the psychological wellbeing. This study was aimed to analyse the prevalence of anxiety and depression in IBD patients and identify its contributory factors in a resource limited setting.

Methodology

A cross-sectional study was carried out at the Gastroenterology Unit, National Hospital of Sri Lanka. The validated hospital anxiety and depression (HAD) questionnaire with two components HAD-Anxiety (HAD-A, range: 1-21) and HAD-depression (HAD-D, range: 1-21) was used. Quality of life (QOL) was scored using the validated Short inflammatory bowel disease questionnaire (SIBDQ). Parametric tests were used to determine statistical significance.

Results

A total of 120 IBD patients (male:female=1:1.14), mean age=44 ±SD15 years) were studied. The majority had ulcerative colitis (75%, n=90) and rest had Crohn's disease (25%, n=30). The mean HAD-A and HAD-D scores were 6.2±SD4.2 and 5.7±SD4.3 respectively. The majority had normal HAD-A score (61.7%) and borderline and abnormal scores were seen in 21.7% and 16.7% respectively. Similarly, the majority had normal HAD-D score (62.5%) and borderline and abnormal scores were seen in 25% and 11.7% respectively. Both HAD-A and HAD-D scores had significant negative correlation with QOL (p=0.002, p<0.001). There was no significant difference between HAD-A and HAD-D scores with type of IBD, sex, age, duration of illness.

Discussion and Conclusions

In our study, a considerable proportion (>35%) had borderline or abnormal scores. Furthermore, higher scores had significant negative impact on the QOL and occupation. Therefore, psychological counselling and support should be

initiated in IBD patients to improve wellbeing and QOL.

OP 19 - Radiological staging of rectal cancer in a resource limited setting

**N N S Lokuhetty, F A Rahman, D W T Marapana,
R Niloofa, S L Seneviratne, I De Zoysa
Department of Surgery, Faculty of Medicine,
University of Colombo**

Introduction

Colorectal carcinoma (CRC) is the third most common cancer in the world, with roughly one third occurring in the rectum. Current guidelines on Rectal Cancer (RC) management recommend pre-operative MRI for loco-regional staging and CT for staging of metastases. This also allows appropriate selection of patients for chemo-radiotherapy (CRT). However, MRI is not freely available in many developing low income countries. We assessed the status of pre-operative imaging for RC in Sri Lanka and evaluated the performance of CT in RC staging.

Methodology

A pre-tested interview administered questionnaire was used to assess the pre-operative use of MRI and CT in RC. CT findings from 37 RC patients managed at the University Surgical Unit were then compared with histopathology findings.

Results

Of the 64 surgeons interviewed, 57 (89.1%) did not request an MRI for their RC patients. Reasons for this included: limited availability and long waiting times due to competing health needs. A CT was requested by all. In RC, the overall accuracy of CT for T staging was 43.2%. 29.7% of T1-T2 tumours were over-staged as T3 and overall accuracy of CT for regional lymph node (LN) staging was 70.3%.

Discussion and Conclusion

CT alone is not suitable for RC staging in any setting. It leads to over-staging and patients may thus receive unnecessary CRT. Measures and processes need to be put in place for improving access to pre-operative MRI among Sri Lankan RC patients.

OP 20 - Management of infected pancreatic necrosis (IPN): Experience of a hepato-pancreatico-biliary (HPB) surgical unit

**R Jayasinghe, D Subasinghe, S Sivaganesh
Department of Surgery, Faculty of Medicine,
University of Colombo**

Introduction

Pancreatic necrosis is a delayed local complication of severe acute pancreatitis. It carries considerable morbidity and mortality especially when complicated by infection. Management is a challenge in terms of determining the timing and strategy of intervention. This study outlines the surgical strategy and resultant morbidity in the management of IPN.

Methodology

Retrospective analysis of prospectively collected data was performed in patients who underwent surgery for IPN at an HPB surgical unit from August 2015 to October 2019.

Results

Five patients were included in the study. All had multiple percutaneous, surgical or endoscopic drainage procedures. Organ failure occurred in 80% (4/5) with ARDS being the commonest. Intra-operative complications were colonic perforations 40% (2/5) and massive haemorrhage 20% (1/5). Necrotic material from all patients grew coliforms. Post-surgical morbidity included wound infection 80% (4/5), infected collections 40% (2/5), pancreatic fistulae (PF) 60% (3/5) and enterocutaneous fistulae 40% (2/5). Late complications were incisional hernias 100% (5/5), diabetes 40% (2/5) and keloid formation 20% (1/5). There was no exocrine failure or mortality. Median ICU and hospital stay were 17.2 (5-30) and 63 (40-89) days respectively. Median follow up was 33.6 (12-48 months).

Discussion and Conclusion

IPN carries a high morbidity. Timely and appropriate intervention with available resources and expertise can minimise mortality. Invasive open surgical strategies for drainage or necrosectomy by themselves carry a high morbidity with prolonged ICU and hospital stay. Increased availability of interventional endoscopic techniques promises good outcomes with less morbidity.

OP 21 - Quality of patient-oriented web-based information on oesophageal cancer

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Introduction

This study was conducted with the aim of analysing the readability and quality of patient education websites on oesophageal cancer.

Methodology

Popular search engines Yahoo!, Google and Bing were searched using keywords oesophageal cancer, oesophageal tumour, oesophageal tumor, oesophageal malignancy, esophageal cancer, esophageal tumour, esophageal tumor, and esophageal malignancy. The first 50 websites resulting in each key word search were evaluated using validated FRES, LIDA and DISCERN scores to assess readability, usability and reliability, and quality of information, respectively. Non-parametric tests were used for statistical analysis.

Results

A total of 108 eligible websites were included in the analysis. Thirty (27.8%) out of the 108 eligible web sites had obtained HON-code certification. The median FRES score of the included websites was 48.2 (range: 15.6-70.1). The median LIDA usability and reliability scores were 46.5 (range: 22-54) and 39.0 (range: 10-51), respectively. The median and the mean DISCERN scores were 50.5 (range: 23-79) and 51.9 respectively. A low DISCERN score (50% or less) was found in 50% (n=54) of the websites. DISCERN score was found to be significantly associated with LIDA usability, reliability and LIDA overall scores ($p < 0.001$) and HON code certification ($p = 0.01$).

Discussion and Conclusion

The quality of the websites providing patient centred information on the internet ranged between moderate and low with regards to readability, usability and reliability scores. Better informed decisions on treatment may be facilitated with the access to good quality information online. Therefore, strategies need to be implemented to regulate and standardise websites to provide good quality, accurate information.

OP 23 - Pre-operative Carcinoembryonic antigen in Colorectal Cancer

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Introduction

Carcinoembryonic antigen (CEA) is a widely used tumour marker in Colorectal Cancer (CRC). It lacks sensitivity and specificity as a screening tool but it is used as a marker for early detection of recurrence in asymptomatic patients. CEA levels are higher in smokers.

Methodology

Clinical, pathological and laboratory data were collected from 114 CRC patients and their pre-operative CEA levels were analysed. The Chi Square and nonparametric tests were used to study the associations with tumour site, tumour stage, age, gender, smoking and liver enzymes.

Results

The mean CEA value was 45.6(SD=88.63). 74.6% (85/114) CRC patients had elevated CEA levels (normal $< 2.5\text{mg/ml}$). The age range of the patients was from 34 to 91 years. Of the patients with increased CEA levels: 61.25% were male and 31.6% were smokers; 34.1%, 35.3%, 42.4%, and 8.2% had stage I, II, III and IV cancers and 60%, 9.4%, 2.4% and 28.2% had left colon, right colon, transverse colon and rectal cancers respectively. Tumour stage was not significantly associated with increased CEA level ($p = 0.51$). Patients with left colon tumours had significant higher CEA levels ($p = 0.004$). CEA levels were not associated with age ($p = 0.23$), gender ($p = 0.92$), elevated ALT values ($p = 0.59$), elevated AST values ($p = 0.19$) or smoking ($p = 0.76$). 33.3% of CRC patients who were smokers had normal CEA levels.

Discussion and Conclusion

In CRC patients, pre-operative CEA levels are significantly associated with tumour site. They are not significantly associated with tumour stage, age, gender, smoking status or liver enzyme levels.

OP - 25 Factors Associated with Delay in Diagnosis of Colorectal Cancer

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Introduction

A delay in diagnosis of colorectal cancer (CRC) leads to poorer clinical outcomes.

Methodology

Clinical, pathological and laboratory data were collected from 165 CRC patients managed at the University Surgical Unit from December 2016 to June 2020. The time interval from first symptom to the first consultation (patient delay) and first consultation to diagnosis (diagnostic delay) were analyzed. Non-parametric tests were used to study the significance of associations.

Results

Of the patients 64.3% were males and the age range was 38 to 94 years. Both median patient delay and diagnostic delay were two months. Of the CRC patients 79.2% first presented to allopathic medical services, but only 30.1% were referred for lower alimentary endoscopy by the first doctor consulted. Mean number of doctors consulted before diagnosis was 3. Number of doctors consulted significantly varied with the patients' occupation ($p=0.01$). Diagnostic delay was greater in patients with abdominal pain than those without (median - 2 vs 1 months, $p=0.03$). No significant associations were seen between patients' age, gender, educational level, occupation and delay in presentation ($p>0.05$). Diagnostic delay was inversely associated the level of impairment of the patient's activities of daily living ($p=0.01$). Rectal bleeding, tumour site or stage at diagnosis was not associated with patient delay or diagnostic delay ($p>0.05$).

Discussion and Conclusions

Patient and diagnostic delays in CRC need to be reduced. Increasing awareness of the public and first contact doctors on symptoms of CRC should help reduce such delays.

OP 30 - Influence of the multidisciplinary team(MDT) on decision making in patients with HPB (Hepatopancreatobiliary) malignancies: a single center retrospective analysis

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Introduction

Diagnosis and assessment of resectability of HPB malignancies are primarily based on imaging characteristics of CT, MRI and MRCP. The decision to offer curative resection usually depends on the report issued by one radiologist. MDT approach is a well-recognized and established concept in high volume HPB centers and have shown clear benefits in prognostication and in isolating patients who can have a curative resection.

Methodology

Retrospective analysis of data from January 2018 to May 2020, of HBP malignancies, of a tertiary referral centre, was conducted. 102 patients were assessed with regard to pre and post MDT decision consistency and factors affecting the change in decision making. MDT consisted of radiologists, HPB surgeons, oncologists and pathologists. Data was analyzed with SPSS software.

Results

Male: Female ratio was 54:48 and mean age of presentation was 55 years. The decision changes observed after the MDT were as follows. Eleven out of 31(35%) patients planned for definitive resection Pre-MDT) changed to non-operative management. Five out of 23(21.7%) patients planned for palliative procedures Pre-MDT, changed to definitive resection post MDT. There were 10 patients without a decision Pre-MDT and 3(30%) of them were decided for resection Post-MDT. These changes were significant($P<.05$). Only one patient after an MDT decision who underwent definitive resection had a decision changed to a palliative procedure intraoperatively.

Discussion and Conclusion

There is significant variation in decision making with regard to surgical management pre and post MDT. Our resectability rates confirm that the MDT assessment is essential and accurate in patient selection for surgery in HBP malignancies.

OP 01 - A Prospective study of patients with necrotizing fasciitis treated at DGH Polonnaruwa in 2019.

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Introduction

Necrotizing fasciitis is a rapidly progressive inflammation and necrosis of soft tissues and fascia, accompanied by severe systemic toxicity. In some cases early diagnosis is challenging. Objective of this study is to identify basic investigations that will aid in early diagnosis in such equivocal cases.

Methodology

This is a prospective study. Patients who underwent wound debridement for clinically diagnosed necrotizing fasciitis and suspected necrotizing fasciitis in DGH Polonnaruwa during 2019 were included in the study. All together there were 24 patients. In all patients we did FBC, CRP, RBS, ABG, plain x-ray of affected area and wound swab culture and ABST before surgical intervention.

Results

75 percent of patients were age more than 60. Diabetes mellitus was a co-morbidity in 66.7 per cent of patients. Commonest affected area was the lower limbs. 62.5 percent of patients had a history of muddy water contact. All the patients had WBC more than 15,000 where as 58.3 percent of patients had WBC more than 25,000. CRP was more than 150 in 83.3 percent patients. 54.1 percent of patients' plain x-rays were positive for soft tissue gas. Majority of wound swab cultures were poly microbial. Commonest organisms were Streptococcus species, Staphylococcus and enterobacteriaceae. Death rate was 33.3 percent in patients who underwent wound debridement within 12 hours of hospital admission, whereas death rate was 100 percent in patients who underwent wound debridement beyond 12 hours of admission due to delay in diagnosis.

Discussion and Conclusions

A high clinical suspicion of necrotizing fasciitis is needed in an elderly patient presenting with cutaneous infection causing swelling, pain and erythema, with co-morbidity of diabetes. High WBC, High CRP, presence of soft tissue gas in plain x-rays highly suggestive for underline necrotizing fasciitis. Diagnostic score for Necrotising fasciitis can be made using these basic investigations which need to be validated in further studies.

OP 08 - Unipedical Neurovascular Islanded pulp advancement flaps - A better choice for fingertip reconstruction

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Introduction

Being a sensory organ and a cosmetic unit, fingertip reconstruction is a challenge in hand surgery. Achieving the volume with quality sensation and good nail are realistic goals with neurovascular islanded pulp advancement flaps.

Methodology

11 Patients with transverse or volar oblique traumatic amputations of fingertips with only 30% or less remaining nail were selected where conventional V-Y advancement was impossible. After debridement the bony length was preserved and a unilateral, Bilateral or total pulp advancement cup flaps were designed based on one neurovascular pedicle around which the flap is mobilized and freed from the surrounding tissues dividing the Grayson's & Cleland's ligaments and periosteal branches. As the flap is designed and mobilized parallel to the nerve we could preserve most major cutaneous branches compared to conventional V-Y advancement flaps which cut across the pulp tissues.

Close follow-up was done up to 4 weeks to assess the flap success and thereafter up to 1 year to observe good sensory recovery and cosmetic nail outcome.

Results

Mean advancement length was 12mm. One patient had a hypothenar graft and two had nailbed grafts. Only two partial epidermal losses were seen which healed completely. Patients regained total sensation in 8-12 week duration. Nailbed expansion seen in all patients with a final good quality nail of 40-50% compared with contralateral finger. With the pressure and scar therapy all patients regained excellent cosmetic outcome with good pulp contour.

Discussion and Conclusion

Neurovascular islanded flaps are promising in fingertip reconstructions but need long-term follow-up for better comparison.

OP 09 - Experience of a Novel Cadaveric Model for Reconstructive Surgery Simulation - Phenoxyethanol Based Cadaver Preservation

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Introduction

Traditionally, formalin was used to embalm cadavers to study anatomy. Tissue changes induced by formalin make it a poor substitute for the use of plastic and reconstructive surgery simulation. A new embalming technique using Phenoxyethanol helps soft-fixation and gives cadavers life-like tissue quality.

Methodology

Cadavers were donated with prior consent for medical teaching and research to the Faculty of Medical Sciences, University of Sri Jayewardenepura. Those cadavers were gradually injected with 20L of embalming solution containing Phenoxyethanol over 48h through the femoral artery. Injected cadavers were sealed in polyethylene cover and frozen at 0 to -5C for six months. A series of microsurgical flap and nerve reconstruction workshops were conducted over 5 weekends covering head and neck, trunk, limbs including brachial plexus. A feedback was obtained from consultant plastic surgeons and Senior registrars about the tissue quality as a self administered questioner.

Results

Surgical simulation of many procedures ranging from skin excisions to microsurgical tissue reconstructions were performed with a special emphasis on microanatomy.

Of the participants 85% (12/14) agree that the experience was similar to operating on live patients. In comparison to living patients, cadavers had the following characteristics. Skin architecture was 65.7% similar to the living skin, muscle quality was 80.7%, the blood vessel architecture and luman patency was 80% and nerve texture and flexibility was 86.5% similar to living tissues.

Discussion and Conclusions

Utilization of Phenoxyethanol preserved cadaver models are a very good method for plastic and reconstructive surgeons prior to practicing the same procedures on live patients.

OP 11 - Cosmetic outcome of platysma muscle suturing versus no suturing in wound closure after thyroid surgery

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Introduction

Platysma is a broad sheet of muscle located in subcutaneous tissue plane of anterior neck. The platysma muscle suturing is a routinely deployed step in wound closure of thyroid surgery. This study was conducted to evaluate the effect of platysma suturing on postoperative cervical cosmesis following total thyroidectomy.

Methodology

This was a randomized double-blinded study with 2 patients group of platysma suture & no suture. All of them are in age between 20 – 40 yrs & were waiting for total thyroidectomy. Duration of follow-up was 6 months & each patient was seen postoperatively at 1st month in aim of assessing surgical sites infections & TSH assessment done at every postoperative visits of 1st, 3rd & 6th months. At the 6 month postoperatively, scar was assessed using Patient and Observer Scar Assessment Score (POSAS). All participants had TSH in normal range & didn't have any surgical site infections. Both observer & Patients were blinded in the session of scar assessment.

Results

25 patients were randomly assigned to each group. There were no differences in POSAS of cervical scar 6 months after surgery in 2 groups (mean(SD) of observer's POSAS 25.52(2.28) versus 25.88 (2.84) in no suturing versus suturing group respectively; P=0.196).

Discussion and Conclusion

Platysma suturing is not a significant factor for cosmetic outcome of cervical scar following total thyroidectomy

OP 27 - Our Experience in Perforator Based Propeller Flaps in Lower Limb Reconstructions

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Introduction

Lower limb reconstruction needs a wide variety of options to choose from thus perforator based propeller flaps play a vital role when other options are not available, especially in lower 1/3rd of the leg.

Methodology

During last year we have performed 3 cases of perforator based propeller flaps in whom all other options including free tissue transfer were not possible due to patient co-morbidities and extensive injury zone. All were middle aged male patients with lower tibia and ankle exposed wounds and active smokers without signs of established vascular disease. One had controlled DM. Two were acute trauma patients and the other had chronic osteomyelitis.

Propeller flaps were based on posterior Tibial or Peroneal artery perforators in the lower leg; preoperatively identified by hand Doppler. After a through debridement an exploratory incision was made 1 inch away the marked perforator and its size and quality was observed after perivascular and fascial release. Then the skin flap was designed isolated on the dominant perforator. Flap was rotated 180 degrees or less around the axis of the perforator before insertion. Secondary defect was skin grafted.

Results

All flaps were successful with good healing though one flap had a venous congestion but managed well with negative pressure therapy(VAC) for one week and got away with only epidermal necrosis. Non of the patients needed repeat surgeries and could hand over to orthopedic team after 4 weeks.

Discussion and Conclusion

Perforator based propeller flaps are a good and reliable alternative in lower limb reconstructions.

OP 31 - Endoscopic Carpal Tunnel Decompression (ECTD) – A novel technique in Sri Lanka

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Introduction

Carpal Tunnel Syndrome (CTS) is the most common compressive neuropathy of the upper limb. Although the minimally invasive ECTD was introduced to the world 20 years ago, it is currently gaining popularity due to minimal post-operative pain as well as early return to normal function. The plastic surgical unit at Army Hospital, Narahenpita, is the only center in Sri Lanka which is equipped to perform ECTD. We report the results of the first 20 patients who underwent this procedure since its introduction to Sri Lanka in September 2019.

Methodology

Patients confirmed to have carpal tunnel syndrome with positive nerve conduction studies were selected. Their symptoms were assessed pre-operatively using the Boston Carpal Tunnel Syndrome Questionnaire. ECTD was performed subsequently by the same Consultant Plastic Surgeon using the 35mm ECTRAII endoscopic carpal tunnel system via a 2 port round sleeve technique. The patients were followed up at the first and sixth post-operative weeks. Symptoms were assessed on a severity scale of 1 to 5.

Results

These are the preliminary results of the first 20 consecutive patients undergoing ECTD. It is an ongoing research. 17 out of the 20 patients had minimal pain with return to normal function within the first week, while at the sixth week, none of the 20 patients reported post-operative pain or scar tenderness. The average time taken to return to normal activities among the above patients was 3 days.

Discussion and Conclusion

Though the sample size is small in this preliminary study, early results show a significant reduction in post-operative pain and scar tenderness. A lengthier follow up of all ECTD patients is being conducted to assess the development of 'pillar pain', the absence of which has been identified as the greatest advantage of this technique when compared to conventional carpal tunnel decompression.

OP 32 - Effectiveness of occupational therapy for hand burns in National Burns Centre, Sri Lanka

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Introduction

Rehabilitation of burn injuries has been increased due to the improved survival rate of people with severe burns. Hand injuries are complex and leads contracture formation and functional impairment. Aim of rehabilitation includes maximize function, prevent contractures, and improve the psychological health. Aim of this study is to assess functional outcome of hand function with cost effective therapy measures in resource poor setting.

Methodology

This study was done in National Burns Centre (NBC) over the period of one year since January 2019. We strictly followed the protocol for all the burns hands from admission to discharge including acute, infected, grafted and spontaneously healed hands. (protocol attached). Functional outcomes assessed by grip strength dynamometer, Vancouver scar scale and Jebson -Taylor hand assessment. Patients who defaulted were excluded in this study.

Protocol

- Dressed burn hand secured with bandaging.
- Separate finger dressings.
- Separate web spaces.
- Splint the hand & elevate
- Remove splint 2-3 times per days & do AROM & PROM.
- Fit on pressure gloves.
- Discharge under close supervision weekly

Results

We have included 447 patients in this study. Number of patients underwent hand splints, micropore taping, soft cloth taping and hand gloves as follows 620,428,251 and 420. 95% (n= 424) of patients achieved good hand function with power & precision grips.

Discussion and Conclusion

Occupational therapy (OT) protocol that used in NBC gains maximum function of burnt hand in resource poor setting. This protocol needs to be compared with other OT protocols in view of cost effectiveness and functional gain.

Mobility	Self-care	Usual activities	Pain/ discomfort	Anxiety/ depression
No problems 153(82.7%)	84 (45.4%)	146 (78.9%)	118 (63.8%)	104 (56.2%)
Slight problems 18(9.7%)	37 (20%)	14 (7.6%)	37 (20%)	65 (35.1%)
Moderate problems 11(5.9%)	41 (22.1%)	14 (7.6%)	18 (9.7%)	12 (6.5%)
Severe problems 1(0.5%)	7 (3.8%)	2 (1.1%)	3 (1.6%)	2 (1.1%)
Unable to do 2(1.1%)	16 (8.6%)	9 (4.9%)	9 (4.9%)	2 (1.1%)

OP 33 - Knowledge and awareness on Cadaveric skin harvest among ICU staffs in National Hospital of Sri Lanka.

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Introduction

Skin coverage is a greatest challenge in severe burns when the donor sites are limited. Early skin cover is important to reduces morbidity and mortality. We use to harvest skin from cadavers at Intensive care units (ICU) for temporary cover of excised burn wounds. As we do not get enough cadaveric donations from ICUs, plan to conduct this study to identify awareness and knowledge on it.

Methodology

We collected data from doctors and nurses working in surgical ICUs (Recovery, Accident service and neurosurgical) by self-administered questionnaire. We analysed the results by SPSS 19 data package.

Results

140 participants responded to our questionnaire including 118 Nurses and 22 doctors. Only 40 % (n=48) of nurses and 60%(n=13) of doctors were aware about cadaveric skin donation. Only 31% (n=44) knew that tissue or blood matching not needed for it. 88% (n=124) knew that graft mainly taken from thighs. Still ICU staff thinks that skin cannot be harvested from patients with co-morbidities. Only 12% (n=18) knew whom to contact when patient for cadaveric skin transplant is identified. Only 17% (n=24) thinks it doesn't cause much disfigurement to the cadaver. 13%(n=18) didn't know any details about skin donation.

Discussion and Conclusion

There is a knowledge deficit in ICU staffs regarding awareness and knowledge on cadaveric skin harvest. We couldn't compare the doctors and nurses as there were less participants in doctors. We need to arrange an awareness campaign to ICUs. In future this should be assessed in general public as well.

OP 03 - Are complications more in right live donor nephrectomy and in male patients ? A study on outcome of single surgeon operated open live donor nephrectomies.

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Introduction

The open and laparoscopic surgeries are currently available options for Live Donor Nephrectomy (LDN). Left LDN is preferred due to the long vein. In Sri Lanka, open surgery is frequently done. This study reports the outcome of 258 open LDN done by a single surgeon.

Methodology

Consecutive open LDN were included. Patient demography, pre and post-operative serum creatinine (Scr), side of LDN, complications were recorded. Incomplete records and patients lost to follow up were excluded.

Results

258 patients were included. 71.4% were males. Mean age was 38 years (23–63). 68.6% underwent left LDN. In a sub-group analysis, mean preoperative SCr and creatinine clearance were 0.90 mg/dl (0.48–1.65) and 96.5 ml/min (86–130) respectively. Three (1.16%) male patients (two right and one left LDN (2.5%vs0.57%)) developed renal bed hematoma needing surgical evacuation. But male gender and right LDN association was not statistically significant ($P > 0.5$). One patient had pneumothorax requiring intercostal tube insertion. Mean post-operative SCr values at 1 week, 1-2, 2-4, 4-12, 12-24, 24-36, 36-52 weeks and after 1 year were 1.37, 1.25, 1.28, 1.35, 1.21, 1.09, 1.07 and 1.00 mg/dl in all patients. This indicates that SCr returns to normal value at approximately 12-24 weeks after the LDN.

Discussion and Conclusion

The incidence of renal bed hematoma in this series is 1.16%. All who developed haematoma were males and 2 underwent right LDN. But these were not statistically significant probably due to small numbers. But this additional risk should be explained preoperatively. SCr returns to normal value after 12-24 weeks.

OP 12 - Angioplasty for critical limb ischaemia of the lower limbs; Is it safe?

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Introduction

Percutaneous balloon angioplasty (PBA) in peripheral vascular disease (PVD) is considered a safer option than open revascularization due to its minimally invasive nature. Hence there is a tendency to consider it as a first line option in the high risk patient who has prohibitive risk factors for open surgery. However, it is not without complications and some of them are limb or life threatening. In this study we aim to present our experience regarding complications following lower extremity angioplasty for critical limb ischaemia (CLI).

Methodology

This descriptive cross sectional study was conducted by retrospective analysis of prospectively collected data over a period of 5 years. Patient demographics, procedure related complications and secondary interventions required for management of these complications were analyzed.

Results

The total number of procedures done was 308. The median age was 67 (29-95) years. 62.7% were males. Majority of the study population was diabetic (88.6%). 38.6%, 59.7% and 11.7% had ischemic heart disease, hypertension and chronic kidney disease respectively.

Death censored limb salvage at 5 years was 77.5%. The overall complication rate was 8.8% (27/308). There were 3 acute coronary events out of which 1 was fatal. There were 5 puncture site hematomas, 3 pseudoaneurysms, 3 arterio-venous fistulas and 11 non-flow limiting arterial dissections. All were managed non-operatively.

Discussion and Conclusion

PBA appears a safe therapeutic option for CLI. Our complications are well within internationally accepted standards. Identification of predictors of these complications may be of value for better patient outcomes.

OP 13 - Mobility after limb salvage in chronic limb threatening ischaemia

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Introduction

Patients with chronic limb threatening ischaemia (CLTI) have limited mobility due to multiple comorbidities and poor physical reserves. Presence of tissue loss and/or ischaemic rest pain are further limiting factors of ambulation. Limb salvage is the ultimate goal after revascularization for CLTI. However data on the degree of mobility after successful limb salvage is limited. The aim of this study is to determine the degree of mobility in this group of patients.

Methodology

Patient who underwent open revascularization procedures for CLTI were entered in to a prospective database and followed up using telephone based interviews. Those who had major lower limb amputations were excluded. The mobility component of the EQ 5D tool was used to assess the extent of mobility.

Results

One hundred and thirty two patients were included in the study. The mean age was 64 years and 69.7% were males. The results according to the EQ 5D questionnaire was as follows.

1. I have no problems in walking about 76 (57.6%)
2. I have slight problems in walking about 27 (20.5%)
3. I have moderate problems in walking about 18 (13.6%)
4. I have severe problems in walking about 02 (1.5%)
5. I am unable to walk about 04 (3.0%)

Age >75 years was independently associated with poor mobility. (p<0.05)

Discussion and Conclusion

After lower extremity open revascularization for CLTI patients appear to retain sufficient degree of mobility. This should be taken as a further incentive for an aggressive revascularization policy.

OP 14 - Quality of life after revascularization for chronic limb threatening ischaemia: a single center experience

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Introduction

Patients with chronic limb threatening ischaemia (CLTI) have coexisting comorbidities and a limited life expectancy. The aim of revascularization in these patients is symptom alleviation and limb salvage. The objective of this study is to assess the Quality of Life (QoL) after open revascularization procedures of the lower limbs for CLTI.

Methodology

Patients who underwent lower extremity open revascularization procedures for CLTI were entered in to a prospective database and followed up via phone interviews. The 5 level EQ-5D tool was used to assess the QoL.

Results

Hundred and eighty five patients participated in the study. The mean age was 63.12 years (37- 89) and 67% were males. The mean follow-up duration was 37.42 weeks (7-60). The limb salvage rate was 71.4%. The results of each QoL components according to EQ-5D were as follows.

Age ≥ 75 years and major lower extremity amputation were independently associated with a significantly poor quality of life. (p<0.05).

Discussion and Conclusion

Successful revascularization with limb salvage leads to better QoL. Interventions for improving limb salvage rate after revascularization such as aggressive follow-up and wound care should be implemented to improve the results.

OP 22 - A prospective descriptive study to evaluate the outcome of patients who underwent TRUS guided prostate biopsy

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Introduction

Prostate biopsy is used to diagnose prostate cancer. This study is designed to assess the complications of TRUS guided prostate biopsy and the correlation between PSA value and Gleason score in a cohort of patients.

Methodology

This was a prospective study involving all patients who underwent TRUS guided prostate biopsy for a period of two years (1.1.2018 to 31.12.2019) at the urology unit, Colombo South Teaching Hospital. Twelve core biopsies were done under periprostatic block. Antibiotic regime adopted was intravenous Coamoxiclav 1.2g and Metronidazole 500mg followed by oral Coamoxiclav and Metronidazole for five days. The patients were assessed for complications during the ward stay and on clinic visit at three weeks. Gleason score and pre biopsy PSA values were evaluated for any correlation.

Results

There were 338 patients. The mean age was 70 years (IQR 66 - 76). Fifteen (4.6%) patients required additional antibiotics for clinically suspected or confirmed urosepsis. Rectal bleeding and acute urinary retention were observed in 8 (2.4%) and 3 (0.9%) patients respectively. 160 patients had prostate cancer. There was a small positive correlation ($r=0.035$, $P < 0.05$) between ISUP Gleason grading and PSA values.

Discussion and Conclusion

The complications of TRUS guided prostate biopsy appears to be low in this cohort of patients supporting the present antibiotic regime. There is no significant correlation between Gleason grading and PSA values.

OP 29 - Descriptive analysis on the impact of PANDEMIC-COVID-19 lockdown measures on the burden and pattern of trauma presentations to accident service unit, National hospital of Sri Lanka (NHSL)

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Introduction

Injuries related to Road traffic accidents (RTAs) contribute significantly to the number of trauma admissions to NHSL. This study aims to describe the effect of COVID-19 lockdown, with regard to mechanism and injury pattern of trauma admissions to NHSL.

Methodology

An observational study was performed comparing trauma admissions from January 20 to May 20, 2020. COVID-19 lockdown period from March 20 to May 20, was compared with two months period prior to lockdown. All trauma patients presented to NHSL during this period were included in the study. Data was collected on mechanisms and pattern of injuries. Statistical analysis was performed using SPSS-22.

Results

A Total of 7108 patients were included. The mean age of the population was 42.76 years (Males- 38.94 and Females- 51.82). RTAs (33.02%) and falls (33.98%) were the commonest mechanism of injury in pre-COVID group whereas falls (53.49%) were in COVID-period followed by RTAs and assaults. The Incidence of RTAs ($p < 0.00001$) and assaults ($p < 0.001$) had significantly reduced during the COVID-period. Incidence of head and neck (23.8% vs 21.9%, $p = 0.015$), chest (5.9% vs 2.9%, $p < 0.001$), abdomen (2.8% vs 1.6%, $p = 0.003$) pelvis (2.9% vs 1.4%, $p < 0.001$) and vascular injuries (2.3% vs 1.3%, $p = 0.008$) had also reduced significantly during the lockdown period. However, home and community based accidents ($p < 0.001$) and self-inflicted injuries ($p < 0.001$) had increased significantly during the COVID period.

Discussion and Conclusion

This study shows that COVID-19 lockdown measures have significantly reduced the trauma burden. Restriction to travel has significantly altered the mechanism and injury patterns of trauma admissions.

OP02 - The Safety and Feasibility of Intrathecal Stem Cell Therapy for Spinal Cord Injuries

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Introduction

Intrathecal stem cell therapy is emerging as a therapeutic strategy for patients with spinal cord injuries. According to western literature, it is well tolerated but there are occasional reports of serious complications such as encephalomyelitis.

Methodology

We did a retrospective analytical study on patients who underwent autologous intrathecal stem cell therapy at Teaching Hospital Karapitiya, Sri Lanka from 2014 to 2018. Stem cells were extracted from patient's peripheral blood following bone marrow induction with G-CSF (Filgrastim). We analyzed 64 cases based on safety and efficiency of the procedure.

Results

Average duration of induction was 5 days. Induction was started with Filgrastim dose of 5ug/kg/day. 48 patients later required doubled dose. Target WBC count of 40000 or higher, was achieved in 49 patients, but sufficient amount of stem cells were extracted from all patients. Majority of patients didn't have side effects related to induction and extraction procedure. Side effects occurred in 6 patients (9.4%) are headache, Fever, abdominal pain and chills. No serious side effects such as anaphylaxis occurred. All the stem cell therapy procedures were combined with decompressive laminectomies. 7 patients underwent additional procedures. No intraoperative complications occurred. Postoperatively, 33 patients had significant surgical site pain but in 31 patients, relieved by simple analgesics. 31 patients had fever, 8 patients had mild headache, 2 patients had signs of meningeal irritation such as neck stiffness. All settled by 3rd postoperative day. CSF leakage occurred in 1 patient. Surgical site infection occurred in another 1 patient. 7 patients had temporary neurological deterioration of limbs but except in 2 patient, improved by the day of discharge. No serious complications such as encephalomyelitis occurred.

Discussion and Conclusions

The procedure is effective and well tolerated without serious side effects. It encourages further utilization and developments of stem cell therapy for patients with spinal cord injuries.

OP 05 - Comparison of laparoscopic entry techniques: Experience from a general surgical department of a tertiary care center.

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Introduction

Both Open and closed methods are commonly used to achieve pneumoperitoneum in laparoscopy. Entry technique is selected based on the intraabdominal organ of interest, anticipation of adhesion, available facilities and the surgeon preference. Appropriate technique and the location of ports plays an important role in the overall ease of progression and the ergonomic experience of the surgical team. Here we present our experience in using different laparoscopic entry techniques.

Methodology

This is a retrospective study, conducted over 1-year period from April 2019 to April 2020. Demographic data, type of surgery, entry technique and complications were analyzed. All patients undergoing laparoscopic surgeries were included in the study.

Results

Total of 228 patients, aged 13 to 75 years with a mean age of 44.1 were included. Fifty three percent of them (n=121) were females. Majority of patients had undergone elective surgeries (69.2%) while 70 patients underwent urgent procedures. Commonest elective procedure was laparoscopic cholecystectomy (n=66) followed by hernia surgeries (n=34), colorectal surgeries (n=22) and upper gastrointestinal surgeries (n=18).

Most common location for initial access was at the umbilicus using open technique (89.4%). Twenty-one patients (9.2%) underwent direct trocar technique (DTT). All DTT entries were for laterally placed ports in patients with virgin abdomens. Only 3 (1.3%) patients underwent close technique at Palmer's point. No major complication that hindered progression was recorded in all groups.

Discussion and Conclusions

Open technique was favored while DTT has shown to be safe and feasible techniques in selected patients specially when laterally placed ports are required.

OP 07 - The clinical accuracy of Alvarado score in the diagnosis of acute appendicitis in Sri Lankan patients.

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Introduction

Objectives: This study was conducted to assess the clinical accuracy of the Alvarado score in the diagnosis of acute appendicitis in a cohort of Sri Lankan patients.

Design : A retrospective analytical study

Setting : Inward patients in surgical ward in Sri Jayawardenapura General Hospital.

Methodology

A retrospective study was performed in patients admitted with right lower abdominal pain. Alvarado score was calculated based on initial inward assessment. Surgical decision to operate or to conservatively manage was taken irrespective of the score and the data regarding the outcome and the histological reports were recorded. The clinical outcomes and histology were correlated with the Alvarado score. Statistical analysis was done using the Chi square test.

Results

A total of 107 patients were analyzed. Mean age was 34 (SD - 18). 61.7% were males and 38.3% were females. 24% underwent appendectomy. The overall sensitivity and specificity were 71% and 94% respectively. In males the Alvarado score was 78% sensitive and 98% specific. However in females the sensitivity and specificity were lower (64% and 88% respectively). The Alvarado score correlated well with a clinical outcomes ($p < 0.001$).

Discussion and Conclusions

The Alvarado score had an acceptable clinical accuracy in this cohort of Sri Lankan patients. However, in females the accuracy was lower than in males. Therefore, Alvarado score can be used as a clinical guide in making decisions.

OP 24 - Efficacy of Paravertebral and Pectoral Blocks in Postmastectomy Pain Management : A randomized controlled trial in a single Surgical Unit in National Hospital of Sri Lanka

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Introduction

Consumption of analgesia according to the WHO pain ladder is common practice in postoperative care including postmastectomy. Further to this relatively newer modality of analgesia is achieved by administration of varying nerve blocks at the operating theatre. Paravertebral and pectoral blocks are commonly adopted in alleviating postmastectomy pain. There are several studies performed worldwide in order to assess their efficacy which shows a clear benefit over conventional analgesia.

Methodology

This randomized controlled trial was conducted among 30 breast malignancy patients who undergoing mastectomy in a single surgical unit at NHSL during a three month period in 2020. A numerical rating scale of 0-10 administered verbally, was adopted to assess the severity of postoperative pain. Evaluations done at 0, 12 and 24 hours post-surgery. 10 patients each was randomly allocated to groups receiving paravertebral block, pectoral nerve block and oral analgesics following due consent process.

Results

Mean pain score at 0, 12 and 24 hours was 1.7 (SD 2.35), 0.8 (SD 1.75) and 1.5 (SD 1.27) respectively in patients administered paravertebral block. Patients underwent pectoral nerve blocks had a mean pain score of 1.3 (SD 1.42), 1.3 (SD 1.57) and 1.2 (SD 1.14) during mentioned hours. Oral analgesics category showed a mean pain score of 2.33 (SD 0.86), 5.22 (SD 1.20) and 3 (SD 0.70). There's a significantly improved pain among the first two groups as calculated by ANOVA analysis.

Discussion and Conclusions

Paravertebral and pectoral nerve blocks show a significant implication in alleviating pain in post mastectomy patients in the study group with better outcome in immediate post-surgical recovery. Larger trials with frequent assessments over longer periods need to be conducted to emphasize efficacy of loco regional anaesthetics in management of post-surgical pain in Sri Lanka.

OP 26 - Correlation of Thyroid cytology with histopathology: A single unit experience

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Introduction

Fine needle aspiration for cytology (FNAC) is considered as the gold standard of tissue diagnosis in Thyroid disease. It is a cost effective and minimally invasive procedure with rapid and minimal complications. This test is widely used in identification and further planning of management of malignant and benign conditions of the thyroid. FNAC has a varying sensitivity and specificity. A study was designed to assess the sensitivity and specificity of FNAC at this institution.

Methodology

This is a retrospective, comparative study of 305 patients from January 2002 to December 2019 who were clinically and biochemically euthyroid and underwent thyroidectomy at Professorial Surgical Unit, Colombo North Teaching Hospital. FNAC were performed at Department of Pathology, Faculty of Medicine, University of Kelaniya. We compared the data of FNAC and their histopathological findings using SPSS 23.

Results

Results show 77.5% sensitivity 91.3% specificity and 77.5% positive predictive value of FNAC in correlation to Histopathology. It has a false positive rate of 8.5%, false negative rate of 4% and negative predictive value of 98.6%.

Discussion and Conclusions

Fine needle aspiration cytology has a high sensitivity and specificity which is comparable with the existing figures of literature.

OP 36 - Improving quality of operation note writing through educational sessions and introduction of Pro-Forma and checklist : A quality Improvement Project

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Introduction

Accurate surgical note writing plays a pivotal role in post-operative management of patients and dealing medicolegal issues regarding patient care. Thus, improving this aspect of medical documentation is essentially a much-needed quality of any good surgery unit.

Objective : To assess the current surgery note writing practices and to improve quality of operation note writing in general surgery unit 01, Teaching Hospital Karapitiya.

Criteria and standard: Criteriae picked from Royal College of Surgeons good surgical practice guide were set at 100% as standard. However, for convenience threshold of compliance were categorised in to full compliance (100%-90%), partial compliance (89%-80%) and minimal compliance (0%-79%).

Methodology

We performed a closed loop audit on quality of operation note writing. Baseline audit was conducted by retrospectively reviewing operation notes from Bed Head Tickets. Educational sessions were arranged for doctors regarding operation note writing. Meanwhile, a pro-forma and a check lists were introduced. After 5 months of implementing these recommendations, a re-audit was done.

Results

The results had improved across the board except mentioning date and comprehensive post-operative instruction which stayed the same.

Mentioning details of the tissue altered improved drastically from minimal to full compliance. While mentioning of surgical incision, indication for surgery, intra-operative findings and antibiotic and DVT prophylaxis improved from minimal to partial compliance, writing type of surgery, name of anaesthetist and intra-operative blood loss came in to existence which were never written before interventions.

Discussion and Conclusions

Quality of operation note writing can be improved significantly with simple interventions at ward level.

OP 06 - Study on cubital vein dimensions of patients presenting for dialysis access surgeries to a single unit.

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Introduction

Diameter of the Cubital Veins (CUBV) is an important factor for the success of Dialysis Access Surgeries (AVF). Therefore it is important to select the ideal vein for AVF. This study is on the dimensions of CUBV.

Methodology

This is a prospective study done by the Vascular and Transplant unit B of the National Hospital of Sri Lanka from June to July 2020. Patients who were referred for AVFs were included. Patients with previous failed AVFs and thrombosed veins were excluded. Data on patients' age, gender, height, dominant hand, and diameters of Cephalic (CV), Basilic (BV), and other CUBV were obtained. CUBV were made prominent by applying a tourniquet and hand exercise. The diameters were measured at elbow crease using Ultra sound scan liner probe at two perpendicular planes and the average was obtained.

Results

67 were included with 34 (50.7%) females. Mean age was 44.6 years (26-82). The mean diameters of CV/BV were 3.50mm (1.3-6.1)/3.36mm (1.4-7.25), Mean diameter of CV/BV in males and females were 3.65/3.44mm and 3.35/3.29mm. But this difference was not significant (p-0.15/0.28). 88.1% were right dominant. The mean diameter of CV of patients less than or equal to 163cms vs. more than 163cms were 3.38mm/3.91mm, this difference was statistically significant (p-0.048). The diameter of the BV was larger (3.50vs3.22) on the dominant upper limb, but this difference was not statistically significant.

Discussion and Conclusions

This study shows that the sizes of CUBV vary. Therefore ultrasound mapping of the veins is essential to produce the best outcome.

OP 10 - Our Experience in WALANT Technique in Hand Surgery – Preliminary Cohort Study

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Introduction

WALANT stands for “Wide Awake Local Anesthesia and No Tourniquet” which might replace general anesthesia (GA) and tourniquet, along with their complications including the COVID risk in hand surgery.

Methodology

This preliminary study was performed as an introduction to WALANT technique in our unit. We included 14 patients of which 5 patients were routine cases, 4 secondary tendon reconstructions and 5 acute hand trauma patients.

First, surgical dissection field was marked with permanent ink delineating neurovascular structures. We used 1:200 000 adrenaline with 0.25% - 0.5% lignocaine solution. Volume depended on the area involved and the body weight.

Anesthetic solution was infiltrated into tissue planes of dissection and 1cm away the marked borders, until the area becomes tumescent. 1st prick was done with an 26/27 G needle in the most proximal point of the surgical field. Surgical incision was made when the skin is pale and anaesthetized.

Surgeon's experience during the procedure and conversion to tourniquet was observed as an indicator of troublesome bleeding. Pain during the procedure was measured with a visual analog scale. Post-operative outcome was assessed in 2 weeks.

Results

In all 12 surgeries the surgeon was satisfied with the bloodless field and none was converted to tourniquet, though early frequent moping was needed. Maximum pain was 3/10 and average was 2.4/10. One digital artery repair was technically difficult owing to adrenalin. Post-operative outcome was desirable.

Discussion and Conclusions

WALANT is a successful alternative to GA with less complications and the added advantage of testing hand function during surgery.

OP 15 - Evaluation of the yield of sigmoidoscopy procedures carried out for left colonic symptoms at a tertiary care centre in Sri Lanka

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Introduction

Although, colonoscopy is the ideal investigation for evaluation of the colon it costly and involves greater patient discomfort. Therefore, flexible sigmoidoscopy is sometimes used as an alternative. This study was aimed to evaluate the use of flexible sigmoidoscopy as the main investigation for “left-sided” colonic symptoms.

Methodology

A retrospective analysis of the sigmoidoscopy reports were done at the Colombo University Surgical Unit, National Hospital of Sri Lanka from February-2006 to May-2015. Reports (n=1816) of patients who had a sigmoidoscopy as the primary investigation for left colonic symptoms were retrieved and analysed.

Results

The majority were males (N=986, 54.3%; mean age=48.7±SD16.1 years). The majority were aged above 40 years (61.5%). Commonest indication was rectal bleeding (N= 969, 53.4%, others: altered bowel habits-14.3% and abdominal pain-13.9%). The splenic flexure was intubated in 24.8% (n=450) and the descending colon in 32.7% (n=594). Bowel preparation was inadequate in (N=67, 3.7%) procedures.

Around 39% were normal studies. Hemorrhoids were the commonest finding (N=812, 44.7%).

Of those aged 40 years or less, the significant findings included, inflammatory lesions (4%), polyps (2.4%) and malignant lesions (1.1%). Whereas in those aged >40 years, the significant findings were benign polyps (4.7%), inflammatory changes (3.1%) and malignant lesions (2.5%).

Discussion and Conclusions

Based on the findings and (7.4%) and (9.9%) of the patients aged 40 or less and above 40 years respectively would need a colonoscopy for further evaluation of the right colon. Therefore, sigmoidoscopy may be a cost-effective initial investigation prior to selective colonoscopy in patients with left-sided colonic symptoms.

OP 17 - Prostaglandin E1 therapy in chronic limb threatening ischaemia: Early results of a novel therapeutic option

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Introduction

Chronic limb threatening ischaemia (CLTI) is a challenging condition to manage due to the inherent complexity of the disease and the poor physical reserves of those who are affected. Open or endovascular revascularization remains the standard treatment for CLTI. Prostaglandin E1 (PGE1) therapy is emerging as a novel therapeutic option for those with failed revascularization or for those who are not amenable for revascularization. In this study we present our early experience using PGE1 for CLTI.

Methodology

Forty patients with CLTI were recruited into the study. Each patient had a number of PGE1 cycles ranging from 1-5. In each cycle 100micrograms of PGE1 was given as a continuous infusion over 10 hours a day for 5 days. Patients were followed up using phone interviews.

Results

The mean age was 62 years and 75% (30/40) of the study population were males. Ninety-five % (38/40) had tissue loss as the indication for therapy while in 5% (2/40) it was rest pain. Eighty-two % (27/40) had failed revascularization procedures while 18% (13/40) were unsuitable candidates for revascularization. The mean follow-up duration was 9.45 months. Amputation free survival and overall survival at 1 year was 75% and 85% respectively.

Discussion and Conclusions

PGE1 therapy appears to be an effective option with acceptable limb salvage rates for patients with CLTI and no other option for revascularization. Further studies with larger patient numbers and longer follow-up are warranted.

OP 18 - Clinical significance of measuring ankle brachial pressure index with Pole test

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Introduction

The measurement of Ankle brachial pressure index is falsely elevated in a setting of arterial calcification. Accurate measurement of ABPI is needed for rational clinical management of chronic limb threatening ischaemia. We evaluated a hydrostatic blood pressure or Pole test as an alternative method of measuring ankle brachial pressure index (ABPI).

Methodology

Consecutive 40 limbs in 28 patients with critical leg ischaemia were included. The pole pressure was obtained by elevating the leg, and measuring the height at which the Doppler signal disappears. The zero-point of the measurement was taken at the level of mid axillary line. Paired T-test was used for statistical analysis.

Results

28 patients were included and the majority were males (n=19; 67.8%) with mean age of the patients was 64.14(39-83) years. All were diagnosed with diabetes. 13 (32.5%) were asymptomatic legs while others had rest pain [n= 8;20%) and tissue loss [n=24;60%). ABPI measured with cuff-manometer was 0.79(+/-0.24) and pole test was 0.35(+/-0.12) with a statistical significance of $p < 0.0001$.

Discussion and Conclusions

Statistically significant low values were obtained for ABPI measurement with the pole test in study population. Pole test might overcome the incompressibility of arteries in measuring ABPI with standard protocol. However, further studies are needed to compare Pole test pressure measurement with absolute pressure measurement to recommend in clinical practice.

OP 34 - Changing pattern of Iatrogenic Bile duct injuries (IBDI): Are we more careful?

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Introduction

IBDI is a serious complication resulting in significant morbidity and mortality. With laparoscopic surgery performed by trained surgeons being widely available in our country, it is expected that IBDI rates/ severity would be comparable to that of the west. This study compares the incidence and severity of IBDI referred to a tertiary care unit, over two time periods (2002 to 2011 – Group A and 2017 to 2020 – Group B).

Methodology

Data was retrieved from a database (Group B, n=33) and was compared with published data (Group A, n=67). Gender, age, type of surgery, severity of injury (Bismuth) and the management (endoscopic vs surgical) was compared in the two groups.

Results

Discussion and Conclusions

Referrals of patients with IBDI to this tertiary care unit has increased significantly, despite surgery being performed by trained individuals. IBDI caused by open cholecystectomy appears to have reduced significantly. However, the injury severity is less and hence the proportion of patients managed effectively with endotherapy is higher compared with the earlier group.

	Group B, n = 33 (3 years)	Group A, n = 67 (9 years)
Mean age	48 years (24 - 75)	40.6 (19 - 80)
Male: Female	8:25	12: 55
Type of surgery		
Laparoscopic Cholecystectomy	26	27
Laparoscopy converted to open	6	10
Open cholecystectomy	1 (p = 0.0002)	25
Endoscopic management	22 (p = 0.0004)	20
Surgical management		
(hepaticojejunostomy)	11	35

OP 35 - Knowledge on Suturing of facial lacerations among general surgical senior house officers

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Introduction

Surgical house officers (SHO) do most of the facial suturing in trauma care. The suturing technique is important for good results, especially in facial lacerations. The layered suturing with edge to edge approximation of the skin with early removal of sutures gives satisfactory aesthetic outcome.

Methodology

A questionnaire-based assessment was done at 3 hospitals by inquiring about suturing technique, suture material, and sizes and post-op plans.

Results

Average number of suturing done per month per SHO is two (total of 21 SHOs). Only 5 (23.8%) do layered suturing. Three think this gives the best scar. The other 17 (76.19%) suture the skin and tissues underneath as a single layer.

Out of them 5 believe that gives best cosmetic outcome, 4 consider it saves theater time, 2 have difficulty in finding suture materials for deep layers and other 6 couldn't reason out their answer. Fifteen (71.42%) use 5/0, 4 (19.04%) use 6/0 and 2 (9.52%) use 4/0 thread size. Eighteen (85.71%) use polypropylene and 3 (14.28%) use polyamide. All put simple interrupted sutures. Fourteen (66.66%) never see their patients postoperatively, 3 (14.28%) see at the 1st post-operative visit. None follow up to assess the scar. Nine (42.85%) remove sutures on postoperative day 7, 10 (47.61%) on day 5, and 2 (9.52%) on day 4. None of them advise or refer for scar therapy.

Discussion and Conclusions

Suturing technique awareness should be increased among doctors. Postoperative assessment and reflective adjustments of the technique is important to deliver quality care. Handling heavy trauma lists might have an impact on quality of care.

POSTER PRESENTATIONS

PP 1 - A cautionary tale- A prospective study on angle grinder injuries

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Introduction

Angle grinders are very useful tools in the construction industry. However, it may cause serious and disabling injuries especially when those are used without adhering safety measures. The aim of the study was to evaluate the pattern of presentation of injuries caused by angle grinders and to identify risk factors.

Methods

A prospective study conducted on patients who have been admitted to the accident service, National hospital Colombo with angle grinder cut injuries during the period of March 2019 to May 2019. Their demographical data, description of the accident and injury pattern were collected and analysed using SPSS.

Results

All were males (n=66) and mean age was 41.62. Among them 87.9% of them were 'professionals'. The dominant upper limb was involved in 27.3% of injuries. Permanent disabilities were found among 7.5% of patients. Among all injuries, 60.6% occurred during extended duty hours (3pm to 6pm). Professional training regarding the usage of angle grinder was not obtained by any of the patient. Adherence to the safety measures were poor among the study participants. 75.8% of the users removed the safety guards by themselves. 12.1% of the injuries occurred outside the working environments. In which, non professionals were injured significantly (P=0.0001). Severity of the disabilities were not significantly associated with professional experience of the patients. (P=0.574).

Discussions & Conclusion

Injuries caused by angle grinders on productive age group are severe and disabling. Teaching and training should be provided for the proper usage of this tool may help to prevent disastrous result.

PP2 - A Prospective study to evaluate the prevalence of leg wound complications following adaptation of 'no touch' saphenous vein harvesting technique for Coronary artery bypass grafting (CABG) and the association with patient comorbidities.

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Introduction

'No touch' technique of saphenous vein graft (SVG) harvesting has proven long-term graft patency over the conventional and endoscopic methods. SVG is harvested with perivenous tissue pedicle without in-situ distention or visualization branch origins. It requires training to improve outcome both in SVG patency and wound healing. The unit adapted the technique and the operators were thoroughly trained. The study intends to audit the outcome with respect to leg wound complications and assess its association with patient comorbidities, diabetes, obesity and age.

Method

Patients who underwent CABG with 'no touch' SVG harvesting in unit III of National Hospital of Sri Lanka, from August 2018 to March 2019 were observed for wound complications prior to discharge (ASEPSIS Score). SPSS was used to assess correlations. Results were compared with statistics in literature.

Results

Out of the total 52 patients, 4 (7.69%) had leg wound haematomas needing drainage. Five (9.61%) had minor wound infections. Moderate wound infections needing antibiotics was seen in 4 (7.69%) and none had severe infection needing debridement. Altogether 5 (9.6%) had impaired wound healing delaying routine early discharge. No statistically significant correlations between complications and age, obesity and diabetes were demonstrated (p>0.05).

Conclusion

The prevalence of complications was comparable to the statistics in the published literature.

PP3 - Prevalence and effects of domestic violence against women presented to teaching hospital Batticaloa

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Introduction

Worldwide 35% of the women experience domestic violence. Sri Lanka is one of the countries with the high rate of violence against women (more than 80%). In Sri Lanka, Batticaloa and Kilinochchi are the districts with the highest rate.

Objectives

Analyse the basic demographic data, and different types of physical effects and its impact of domestic violence against women presented to Teaching Hospital Batticaloa.

Methodology

This cross-sectional analysis was carried out for four months from 1st of June, 2018. All the female patients (Total-79) who experienced domestic violence and presented to Teaching Hospital Batticaloa were analysed in this study. Interviewer administered questionnaire (IAQ) and Bed head tickets (BHT) were used to collect the data, and they were analysed by using SPSS program. The ethical clearance for this study was obtained from Ethical review committee of the faculty of Health care Sciences, Eastern University (E/2018/47).

Results

Fifty-three percent of the victims are in the age between 21 to 40 years. In those affected females, 86% are Tamils. Around 77% of the females are unemployed and 8.8% are school going girls. Most of the affected women (86%) are married. Around 34% of the victims are physically abused by their husband. Due to this domestic violence 7% of the females had major impact in their lives.

Conclusion

Tamil, married, unemployed females in their 21-40 years are commonly affected by the domestic violence. Non-relative males are common (47%) abusers. More than 25% of the female experienced domestic violence, need surgical clinic follow up for some extent.

PP4 - Quality standards in Upper Gastrointestinal Endoscopy in a Tertiary Care Center: A prospective observational study

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Introduction

Upper Gastrointestinal Endoscopy (UGIE) is a minimally invasive diagnostic modality which is used widely in Sri Lanka. We have noted a deficiency in maintaining quality standards during the procedure and documentation. The aim of this study was to assess the degree to which UGIE performed in a tertiary care unit in a developing country maintains quality standards compared to established guidelines.

Methodology

Data of 68 patient's UGIE were assessed prospectively over 6 months, and is compared with the quality standards (16 components) of the British Society of Gastroenterology (BSG). Our quality is graded as Poor, Slight, Fair, Moderate, Substantial and Almost perfect, relative to the BSG standards.

Results

Among the 16 components of quality standards only 4 (kappa >0.81) were almost perfect. Three (kappa >0.0 and <0.20) were slight. One (kappa > 0.41 and < 0.60) was moderate. Another 4 (kappa >0.61 and <0.80) were substantial. Five (kappa <0) components were poor (kappa <0).

Conclusion

There are inadequate quality standards which are maintained during UGIE procedure as well as documentation. Following a standard protocol and filling a pro-forma will increase the quality of UGIE in managing patients with upper gastrointestinal pathologies. We have developed a proforma taking in to consideration the components required to maintain quality standards.

PP6 - Incidence and patterns of brain tumors in Neurosurgical unit Teaching Hospital Kurunegala from May 2018 to May 2020

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Introduction

Different types of brain tumors exist. Some brain tumors are benign and some are malignant. In malignant tumors, there can be primary or secondary (metastatic) brain tumors. General signs and symptoms caused by brain tumors may include new onset or change in pattern of headaches, behaviour changes, seizures, vision and hearing problems.

Methodology

Prospective analysis of patients underwent intervention (resection or biopsy) for brain tumors in single neurosurgical unit in Kurunegala from May 2018 to May 2020 were carried out.

Results

68 patients underwent intervention for brain tumors in neurosurgical unit in Kurunegala from May 2018 to May 2020. Out of 68 patients 39 (57.4%) were females and 29 (42.6) were males with mean age of 49.9 years. Out of 68, 57 (83.8%) had primary brain tumors and 11 (16.2%) had metastatic brain tumors, mainly from thyroid carcinoma. 20 (29.4%) patients had Meningioma, 15 (22.1%) had Glioma, 11 (16.2%) had metastatic tumors, 6 (8.8%) had pituitary adenoma, 3 (4.4%) had schwannoma and 2 (2.9%) had Non-Hodgkin's Lymphoma. Out of 68, 29 (42.6%) patients had brain tumors located in temporo-parietal lobe.

Conclusion

The signs and symptoms of a brain tumors vary greatly and depend on the size, location and rate of growth of the tumor. Overall incidence of brain tumors in less than 60 years age group were 72%. So early diagnosis with imaging in those presenting with symptoms suggestive of a brain tumor would have better outcome.

PP7 - Is laparoscopic appendicectomy safe in the hands of junior trainees in surgery?

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Introduction

Laparoscopic appendicectomy (LA) is considered as the mainstay of treatment in acute appendicitis. LA is a basic laparoscopic procedure and therefore can be used as a training tool for surgical trainees. It is considered an index operation for junior surgical trainees. The aim of this study is to assess whether LA is safe to be carried out by a junior surgical trainee.

Methodology

The study was conducted at a tertiary care unit in Colombo. Data was collected retrospectively. A total of 152 LA (including those which were converted to open appendicectomy) performed between January 2018 to May 2019, by surgical trainees (both junior and senior) were included.

Gender, age, initial investigation findings, intraoperative findings, operative time, hospital stay, postoperative complications and histology data were analysed. Findings were compared in two groups – operated by junior and senior surgical trainees.

Results

One hundred and three surgeries were performed by junior trainees while 49 were performed by senior trainees. There was no significant difference in complicated appendicitis (21.4% vs 34.7%), operative time (71m vs 68m), conversion rate (12.6% vs 16.3%) and hospital stay (3d vs 3d) between these two groups. Overall complication rate was 3.9%.

Conclusion

Our findings were comparable to previously published data and no statistically significant difference was noted between the two trainee groups in terms of operative finding, hospital stay and postoperative complications. The results suggest that LA can safely be performed by the junior surgical trainees with acceptable outcomes.

PP8 - Traumatic arterial spasm in lower limb: a common and an important cause for diagnostic dilemma

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Introduction

Spasm of arteries, following trauma is a diagnostic dilemma. This study presents a series of lower limb arterial spasms causing transient distal ischemia following trauma.

Methods

This is a prospective study of patients admitted to the National hospital of Sri Lanka Colombo from October 2019 to February 2020. The arterial spasm was diagnosed if the pulse was absent or of low volume in the injured limb and;

- The pulse reappeared after a period of observation or
- Angiography demonstration of in line flow or
- Visual confirmation of spasm on exploration

Confirmed arterial injuries (e.g. laceration, contusion, etc.) and mangled limbs were excluded. All who had injuries to the proximal Tibia and above, underwent angiographic confirmation of intact arteries.

Results

18 patients with arterial spasm were included. 16 (88.9%) were males. Median age was 27.5 years (13-70). The causes of injuries were road traffic accidents in 17 (94.4%) and iatrogenic in one. There were 9 (50%) tibial, 5 (27.8%) popliteal, 2 femoral and 2 iliac artery spasms. All had fractures or joint injuries or underwent joint intervention. 3 (16.7%) patients underwent exploration and Fogarty dilatation of the arteries. 15 (83.3%) underwent only fasciotomy. In all patients the distal pulses appeared following a period of observation or after surgical exploration.

Conclusions

This study shows that young males are prone to develop spasms following trauma especially in tibial and popliteal arteries. Excluding obvious vascular injuries and confirmation of spasm with more angiographies, will help to avoid unnecessary surgical explorations.

PP9 - Outcome of live donor nephrectomies ; anatomical variations of the renal artery is associated with increased complications

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Introduction

Renal artery (RA) variations occur in 18 % to 21%. Variations determine the side selection and the outcome. This series reports the renal vascular anatomy (RVAS) variations and associated complications during live donor nephrectomies (LDN).

Methods

Consecutive LDN done by a single surgeon were included. Patients' demography, LDN side, RVAS variations and complications were recorded. The kidney with worse function and least number of RA were selected for LDN. The RVAS was assessed by Computed Tomography and intra-operatively. Single RA and vein with hilar division was considered normal anatomy.

Results

159 were included with 103 (64.8%) males. Mean age was 38.2 years (23-63). 106 (66.7%) were left LDN. 136 (85.5%) had single RA of these 34 (21.4%) had early branching (EB). 23 (14.5%) had multiple RA (2 in 21 and 3 in 2). Therefore variations occurred in 35.8 %. In a sub group analysis of 123 renal veins, only 6 (6.8%) with single RA but 9 (25.7%) out of 35 with multiple arteries or EB arteries had multiple veins. This difference was statistically significant (p=0.004).

11 (6.9%) had complications (3 renal bed haematoma). 2 of 3 hematoma patients had EB of RA (5.9% vs 0.8%) and underwent right LDN (3.8% vs 0.9% / p>0.05).

Conclusions

RA variations occur in 35.8 %. Multiple arteries and EB is associated with multiple veins. The complication rates in patients with EB appear to be high. However this was not statistically significant probably due to low numbers.

PP10 - Upper limb vascular injuries. A unique problem.

A single unit experience in a tertiary care centre

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Introduction

Upper limb vascular injury (ULVI) is a common problem which results in loss of limb, life or significant disability if not properly managed. This is a prospective study of ULVI presenting to a single unit at the National hospital of Sri Lanka Colombo.

Methodology

Study was done from October 2019 to February 2020. Details regarding demographics, cause, ischemic time (IT), type of injury, surgical procedure and outcome were collected. Patients not suitable for revascularization and incomplete data (6 patients) were excluded.

Results

There were 47 ULVI and 41 patients were included. Mean age was 36.2 years (2-81). 32 (78%) were males. mean IT was 9.4 hours (3-26). Cuts (36%/n-15) and fractures (34 %/n-14) were the most common cause followed by iatrogenic (22%/n-9) injuries. Forearm vessels were commonly injured (49%/n-20) followed by brachial artery (41%/n-17). 16 (39%) arteries were transected and 9 (22 %) were in spasm and 7 (17%) had contusion. 74% underwent revascularization. One brachial artery was ligated to control bleeding. Forearm vascular injuries were managed with plastic surgical team. There was no secondary amputation. One patient died due to myocardial infarction. Therefore the limb salvage rate was 97.6%.

Conclusion

Mean IT of 9.4 hours is more than the “golden time “time of 6 hours. This study shows that such limbs can be salvaged provided it is viable and not mangled. This delay can be minimised and the functional outcome can be improved of by having established multi-disciplinary team at the trauma centre.

PP11 - The occurrence and associated factors of positive tumor margins among wide local excision specimens:

A retrospective study

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Introduction

Breast carcinoma is the commonest cancer among Sri Lankan women. Wide local excision is a standard surgical option for early breast cancer. The aim of this study was to study the occurrence of positive tumor margins in wide local excision specimens.

Methodology

We reviewed 39 wide local excision specimens over a period of 15 months (1st January 2019 to 1st April 2020) from surgical ward 30A, National hospital of Sri Lanka. The occurrence of positive tumor margins and the tumor characteristics were analysed. The data were analysed using SPSS software (version 23).

Results

A total of 62 female breast cancers underwent surgery during the study period, of which 39 (62.9%) underwent wide local excisions. Five (12.8%) had positive tumor margins. The mean age of women with positive margins was 50.7 years. The mean size of the primary tumor was 4.0 cm, the majority (60.0%) of which were greater than 2.0 cm, but less than or equal to 5.0 cm (T2). All were invasive ductal carcinomas (NOS), had the majority (60.0%) were of Nottingham grade 3.

Conclusion

Our study shows that the occurrence of a positive margin among wide local excision was 12.8% a figure that is comparable to those of other studies. Tumors with positive margins in this study were large, 4.0 cm (T2), and common in relatively young women. Frozen section technique should be instituted to help the surgeon achieve negative margins intraoperatively.

PP12 - Performance measures and quality standards in lower gastrointestinal endoscopy in Sri Lanka:

A Prospective Observational Study

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Introduction

Lower gastrointestinal endoscopy (LGIE) is the gold standard diagnostic tool in evaluating large bowel mucosal pathology. Procedure guidelines have been developed to ensure patient safety and diagnostic accuracy. There is a lack of data regarding the quality of LGIE performed in Sri Lanka.

Methods

Aim of this study was to assess the quality of LGIEs performed in a tertiary care center in Sri Lanka in comparison with the standard guidelines. A prospective observational study was carried out in a tertiary care center in Sri Lanka by recording data of 210 patients who underwent LGIEs. Variables assessed were selected from quality indicators given in the guidelines of the American Society of Gastroenterologists and the European Society of Gastrointestinal Endoscopy. Achieved values were compared with pre, intra, and post-procedure quality targets. Degree of achievement was evaluated by measuring Kappa values (k), categorized as, no ($k \leq 0.2$), minimal ($0.21 \leq k \leq 0.40$), weak ($0.41 \leq k \leq 0.60$), moderate ($0.61 \leq k \leq 0.80$), substantial ($0.81 \leq k \leq 0.90$) and almost perfect ($0.91 \leq k \leq 1.00$) level of agreement.

Results

All 6 pre-procedure measures, 6 out of 7 intra-procedure, and 2 out of 4 post-procedure measures did not reach the quality targets. Only 1 out of 17 indicators reached the expected performance target. The majority, i.e. 6 out of 17 quality indexes had no agreement ($k \leq 0.2$) with the standard values.

Discussion and conclusions

The quality of LGIEs with regard to all three aspects falls below the expected standards; indicating poor quality of LGIEs performed. Using a standard protocol based Pro-forma and maintaining an electronic database will increase the quality of LGIEs.

PP13 - An audit on skin and soft tissue infection of the lower limb

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Introduction

Skin and soft tissue infection is a clinical diagnosis, include wide range of clinical presentations, from cellulitis to necrotizing fasciitis (NF) involving deeper tissues. Identification of risk factors and diagnosis of the extent of the involvement is important in management.

Methods

The audit was from patients admitted to a surgical ward at NH-Kandy from January to March, 2020 with clinical features of lower limb soft tissue infection. Clinical presentation, comorbidities, risk factors, diabetic foot care awareness, management and outcome were recorded.

Results

There were 32 patients, 19(59.3%) male and 13(40.6%) female, age ranging from 17 to 90 years. (median age was 62). Of them majority (21) were cellulitis and erysipelas who responded to antibiotics without surgical intervention, discharged within 4 days. Only 03 patients had necrotizing fasciitis, 02 underwent above knee amputation and one underwent extensive wound debridement. Rest of the 08 were cellulitis complicated with abscess formation and necrosis of deeper tissue without evidence of NF. They underwent incisional and drainage, releasing skin incision and wound debridement. 21 out of 32 (65.6%) were diabetics. From them 52.3% were having tenia pedis infection. A significant number of diabetic patients (42.8%) haven't received foot care awareness. 7 out of 32 had skin breach following trauma due to RTA and animal bites. 2 already had lymphoedema and one had eczema.

Conclusion

Though cellulitis was the commonest, necrotizing fasciitis causes significant morbidity. So, early diagnosis, aggressive treatment and risk factor modification is important in managing patient with skin and soft tissue infection.

PP14 - Post-operative efficacy in uniport VATS decortication for Empyema thoracis

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Introduction

Empyema thoracis is a well-known complication of pneumonia. Video-assisted thoracoscopic surgery (VATS) decortication is a minimally invasive surgical method for treatment of stage 2 and 3 empyema, while uniport VATS (U-VATS) is still practiced in limited centers had favorable outcome.

Methodology

A total of 48 patients with stage 2 and 3 empyema thoracis including tuberculous empyema were retrospectively evaluated in terms of post-operative morbidity, hospital stay, ICU stay and IC tube duration. All surgeries were done at NHRD Welisara from November 2017 to January 2020 by the same surgeon.

Results

In the sample of 45 patients who underwent U-VATS decortication, there were 42 (93.3%) males and 3 (6.7%) females, with the mean age of 45.4 years . Three U-VATS decortications were converted to open thoracotomy .There were no hospital mortalities. Eighteen (40%) Patients were having tuberculous empyema. Overall U-VATS patients had a mean postoperative hospital stay of 9 days and IC tube duration of 6 days. Only 26(57.7%) patients were admitted to the ICU with a mean of 1day. There is no statistically significant difference between tuberculous empyema and non-tuberculous empyema groups for duration of hospital stay ($P= 0.124$) and duration in the ICU ($P=0.672$).How ever IC tube duration was shorter in non-tuberculous empyema group ($P= 0.027$, $CI=0.306 - 4.95$) which is statistically significant.

Conclusion

Uniport VATS decortication is feasible, safe and effective minimally invasive surgery for stage 2 and 3 empyema thoracis with less morbidity and mortality including tuberculous empyema patients.

PP15 - Effect of posterior lumbar interbody fusion for spondylolisthesis on quality of life

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Introduction

Spondylolisthesis is a common cause for disabling lower back pain and neurological deficit. Posterior lumbar interbody fusion (PLIF) is one of the surgical techniques used for one or more intervertebral disc spaces. PLIF is an option for patients with spondylolisthesis with neurological deficit or failure of conservative management.

Methodology

Retrospective data analysis of 31 patients who underwent PLIF for grade 1 and 2 spondylolisthesis in neurosurgical unit-Teaching Hospital Kurunegala from 2018 December to 2020 January, were assessed in the clinic at 3rd month and first year postoperatively in terms of effect on pain and disability affecting activities of daily living . The pain was assessed using a numerical Pain scale and disability was assessed using the Modified Barthel Index (MBI).

Results

In the sample of 31 patients who underwent PLIF, 11(35.5%) are females and 20 (64.5%) males. The mean age was 55years. All patients had severe backache with or without sciatica. Only 10(32.3%) patients had both pain and lower limb motor deficit. There is a significant improvement in the postoperative disability($p<0.001$, $CI=0.732-1.268$) and pain ($P<0.001,CI=3.366-4.698$) following PLIF compared to preoperative disability and pain respectively .There was no improvement in the disability score in 8 patients out of which six patients had osteoarthritis of the knee.

Conclusion

Posterior lumbar interbody fusion for spondylolisthesis is a very effective surgical technique to reduce the disability due to pain and motor deficit thus improving the quality of life. Suggest further studies on clinical effectiveness of PLIF on patients with osteoarthritis.

PP16 - Evaluation of the colonoscopic findings of the patients at a peripheral unit.

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Introduction

Colonoscopy is the first line assessment procedure for patients presenting with lower gastro intestinal symptoms. It is widely performed in Sri Lanka with the expansion of endoscopic units in government hospitals. Colonoscopic findings play a vital role in patient management and used as screening, diagnostic, therapeutic and surveillance procedure.

Methods

Study was conducted at District General Hospital Gampaha Endoscopy unit. Patients with lower GI symptoms were included. All the patients were given 4 packets of kleen prep as bowel preparation. The data was collected from 1.1.2020 to 30.6.2020. 101 consecutive patients undergone colonoscopy by surgical side B during 6 month period were evaluated. Data was analyzed using SPSS software.

Results

There were 41(40.5%) male and 60(59.4%) female patients. 27(26.7%) patients were between 60-69y . Good bowel preparation seen in 87(86.1%) patients and 14(13.8%) had poor preparation and procedure was abundant. Full colonoscopy done in 78(77.2%) cases, 9(8.9%) had acute bends and full procedure not done. Normal study seen in 48(55.2%) of cases. Polyps seen in 15(17.2%) cases 5 snare polypectomies and biopsies done for others. 6(6.8%) patients had malignant growths and 4 were rectal carcinomas. Inflammatory bowel disease seen in 2 cases. 16(18.3%) patients had Hemorrhoids, 10 undergone ST Injections. 5 chronic anal fissures, 3 fistula cases detected. No bowel perforations, 2 patients had significant bleeding as complications.

Conclusion

Most of the patients were elderly and significant number of them had positive findings. Introducing colonoscopy as a screening procedure for people above 50 years of age should be considered.

PP17 - Outcomes of laparoscopic cholecystectomy in a single general surgical unit

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Introduction

Laparoscopic cholecystectomy (LC) is the commonest surgical procedure for cholelithiasis. This study was aimed to assess the outcomes in a cohort of patients who underwent LC in a single surgical unit.

Methods

This is a retrospective study including all patients from a single surgical unit who underwent LC from January 2016 to March 2019.

Results

A total of 114 LC were performed and 78.1% were female. The mean age was 48.65 years. Among elective cases, majority (93.9%) were operated for symptomatic gallstone disease. Patient's wishes, associated comorbidities and gall bladder polyps were the other indications. Conversion rate to open cholecystectomy was 11.4%. Reasons for conversion were adhesions(n=6), difficult Calot's triangle dissection(n=5), intrahepatic abscess(n=1) and iatrogenic bile duct injury(n=1). Bothersome pain(n=27), vomiting(n=1), Ileus(n=1) and bile duct injury(n=1) were the main post op complications. Drain was placed in 63 patients and the mean day of removal was 2.9375. Most (n=73, 67.5%) required only simple analgesics. Forty-four (38.6%) patients had to stay for more than 2 days at hospital (mean 2.385days, median 2days, range 1- 18days).

Placement of drain and bothersome pain were statistically related to prolonged hospital stay(p<0.05). Conversion to open cholecystectomy has significant relationship with bothersome pain. However, escalation of analgesics according to WHO analgesic ladder did not help reduce hospital stay.

Conclusion

Bothersome pain and placement of drain are causes for longer hospital stay. Conversion is associated with bothersome pain which is self-explanatory. Poor response of pain to escalation of analgesics suggests an emotional component involved, which needs further evaluation.

PP18 - Major limb amputations in a single surgical unit of a tertiary care center.

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Introduction

Major limb amputation is carried out to excise ischemic, infected, necrotic tissue, or locally unresectable tumors, above the wrist and ankle level of the limb.

Methods

This a retrospective study, conducted from patients who has undergone major limb amputation at surgical unit C, National hospital Kandy, from April 2019 to April 2020. Demographic data, indication, site of amputation and post-operative details were analyzed.

Results

A total of 29 amputees, aged 32 to 89 years (median age 59) were included, of them 20 (68.9%) were male. Lower limb amputations were the commonest (26 out of 29). 16 were below knee amputation (BKA) and rest were above knee amputation (AKA). All upper limb amputations were above elbow. Unsalvageable limb due to critical limb ischemia in vascular disease (55.1%) was the leading cause, followed by severe infection with extensive tissue destruction in extremity in diabetic. (34.4%). 03 (below 40 years) were due to trauma following road traffic and railroad related accidents.

From lower limb amputees, 01 had immediate post op bleeding, 03 had stump break down and 04 had deeper infection which need surgical intervention. Among them one amputee who underwent BKA had to undergo revision amputation at above knee. One had to undergo contralateral BKA after 4 months of first amputation. 04 lower limb and 01 upper limb amputees died in post-op period.

Discussion and Conclusion

Peripheral vascular disease and diabetes are the leading causes of major limb amputation. Most of the time amputation is a lifesaving procedure which should not consider as a failure of treatment.

PP19 - Factors determining the efficiency of obtaining informed surgical consent

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Introduction

Inadequacies of obtaining informed surgical consent (ISC) are increasingly recognized worldwide. Here, we intended to assess factors associated with obtaining better ISC.

Methods

Patients who underwent surgeries at the National Hospital of Sri Lanka were interviewed to explore how their ISC was obtained. A score for efficiency of obtained ISC, hereafter referred to as the "ISC score", was computed using cumulative 5-point Likert scale scores. Factors associated with better ISC scores were explored using non-parametric analyses.

Results

We analysed 108 patients (male:female=1:1.2) who underwent general surgical (n=70) and orthopaedic (n=38) procedures. ISC was obtained by intern medical officers (IMOs) (n=57, 53.3%), senior house officers (SHOs) (n=30, 27.8%), registrars (n=15, 13.9%), senior registrars (SRs) (n=5, 4.6%) and consultants (n=1, 0.9%). Supplementary visual aids were used by 20 (18.7%) when obtaining ISC. A less-familiar language was used on 16 (14.8%) patients. Patients' age and educational level did not associate with the ISC score (Spearman's test, $p > .05$). The score was determined by the designation of the person who obtained ISC ($H(3)=14.676, p=.002$), where SRs, registrars and IMOs performed better than SHOs. Using a language familiar to the patient was associated with higher ISC scores ($U=509.5, p=0.049$), while using visual aids help patients better understand the purpose of the surgery ($U=1133, p=.017$). SRs (75%) and registrars (46.7%) frequently used visual aids compared to IMOs (3.5%) and SHOs (23.33%) ($X^2(3)=29.490, p=.0005$). Surgical (n=11, 10.2%) and anaesthetic (n=33, 30.6%) complications, alternatives to surgery (n=32, 29.6%) and recurrence/failure rates (n=25, 23.1%) were frequently missed when obtaining ISC.

Discussion and conclusions

Attention should be paid to discuss the possible surgical/anaesthetic complications, expected outcomes and alternatives when obtaining ISC. Involvement of senior staff, using visual aids and a language familiar to the patient improves ISC taking procedure.

PP20 - Study on anatomical variations of the superficial veins at the elbow region.

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Introduction

The veins in the elbow region (CUBV) are commonly used for venepuncture and for dialysis access surgeries (AVF). Therefore anatomical variations of these veins should be understood to avoid complications. This study describes such anatomical variations.

Materials and methods

This is a prospective study done by the Vascular and Transplant unit B of the National Hospital of Sri Lanka, Colombo from the June to July 2020.

Patients referred for AVFs were included. CUBV of both upper limbs were assessed. Information on age, gender and dominant hand were collected. Patients with previous venous interventions and thrombosed veins were excluded. CUBV were made prominent by applying tourniquet and hand exercise. Ultrasound scan (USS) was used to assess the anatomy. CUBV were categorized into types A, B, C, D and other (See diagram below).

Results

62 upper limbs were included. 34 (54.8%) were from females. Mean age was 44.2 years (26-82). Type A/B anatomy was present in 37.1%/46.8%. The commonest type in males was type A (15/28) and it was type B (21/34) in females, this difference was statistically significant ($p < 0.05$). There was no difference in the anatomical type according to the side.

Conclusions

This study shows that CUBV anatomy varies. Type B was the commonest anatomy (46.8%). Males have more type A anatomy (65.2%). Venous anatomy can only be clearly mapped with USS especially in obese and when the veins are small. therefore USS mapping is essential in all patients undergoing AVFs.

PP21 - A cross-sectional study on the economic burden of diabetic foot ulcer at Sri Jayawardenapura General Hospital

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Introduction

Diabetic foot ulcers are increasing globally. They causes major burden to health service especially in resource limited developing countries like Sri Lanka. This study was aimed to assess the economic burden of diabetic foot ulcer at Sri Jayawardenapura General Hospital.

Design

A single center cross sectional study was carried out.

Setting

Inward patients in surgical wards in Sri Jayawardenapura General Hospital

Methodology

A systematic sampling technique was used to select the study participants. Patients admitted with diabetic foot ulcers were included in study. 10g monofilament test was used to assess neuropathy. Data was collected using an interviewer administered, structured and pretested questionnaire. Cost was calculated based on the final bill of the patient.

Results

A total of 62 patients were analyzed up to now. The median age was 56 years (SD=7). The mean duration of diabetes was 10 years (SD=5). The mean overall cost was 61,335 rupees (max of 108,890 -minimum 12,800). Peripheral neuropathy with loss of sensation was seen in 80%. Absent distal pulses was seen in 54%. Proper foot care practices was seen only among 10%. History of amputation was seen in 16%.

Conclusion

Diabetic foot ulcer leads to significant economic burden to Sri Lankan health care system. Poor knowledge on foot care and foot wear should be corrected to prevent future amputations.

PP22 - Early experience of Obesity Surgery in a Rural District General Hospital

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Introduction

Obesity is a rising threat to the public health as it associated with numerous non communicable diseases. Even in rural areas there is a rapid surge of obesity with a very high unmet demand. Quite surprisingly, we noticed (in an audit that we conducted) that awareness of obesity as disease is significantly high. Therefore, patients were recruited from Endocrinologist, Chest physician and General Physicians to consider operative interventions. Indications were morbid obesity and Metabolic Syndrome or Morbid Obesity with Obstructive Sleep apnea (OSA).

Methodology

Selected Patients (having been referred by other specialties) underwent at least one round of counseling regarding the procedure itself, possible complications and outcome and the operative experience of the Surgeon. Every time first author had a discussion with patient's family members and all their questions were answered. Most importantly patients were thoroughly advised for the dietary compliance.

All patients underwent Upper Gastroscopy (OGD) before the procedure and Laparoscopic Sleeve Gastrectomy was performed as the procedure of choice. Post-operative care was given according to the protocol that includes ICU care for first 24 hours and extended when necessary. Every patient carefully followed up by first author in every 2 weeks for first 3 months and thereafter monthly for first year.

Results

Total 7 patients underwent the operation since 2019 March with uneventful post-operative period. Their BMI was above 40 and 6/7 were female. All patients had OSA and Diabetes. Weight reduction was ranged from 31 kg to 5kg. (First and the last case figures) no drop outs in follow up and no lapses notice in compliance.

Conclusion

Bariatric operations can be safely done even in peripheries with the support of other specialties and necessary core surgical skills pertaining to Bariatric operations.

PP23 - Laparoscopic Splenectomy for enlarged spleen (massive spleen) A technical note

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Introduction

Over the decades Laparoscopic operations became the standard of care for most of the abdominal operations. However, traditionally, enlarged spleen was removed by open procedures due difficulty in accessibility, difficulty of handling enlarged vessels. However, open operations for Splenectomy leave a stigma of a large ugly scar in the upper abdomen.

Patient selection

Patients were referred by Haematologist and Paediatricians and commonest indication was transfusion dependency.

Technical description of the procedure/Method

Patient Position on the semi lateral position (spleen side up) and table bridge rises to prompt the left flank. Camera port inserted through a sub umbilical incision. Other working ports placed accordingly. Usually three ports between the mid clavicular line and the mid axillary line. Lateral most and the lowermost port usually replaced with a 12 mm port to interchange the camera. Dissection usually starts from lower border to separate the colon and dissection continue to divide spleno renal ligament and pancreatic tail preserved in all these cases. Then dissection continues to secure short gastric vessels. Skeletonized vascular pedicle secured with 45 mm vascular stapler. Specimen was retrieved by using a polythene bag through the enlarged sub umbilical port.

Results

Total 7 patients underwent surgery and their information tabulated below.

Age	Gender	Indication and size of the spleen
27y	F	Warm type hemolytic Anemia with SLE
25y	M	Beta Thalassemia Major
16y	M	Beta Thalassemia Major
11y	F	Beta Thalassemia Major
24y	F	Hereditary spherocytosis
12y	M	Beta Thalassemia Major
16y	F	Beta thalassemia Major
Size of the spleen range from 18 cm to 24cm.		
None of the patients required ICU care.		
All patients discharged within five days.		
Average blood loss < 20ml.		

Conclusion

Laparoscopic approach for massive spleen is feasible. However, availability of advanced equipment like energy devices (ultrasonic) and stapling devices are essential for the success.

PP24 - Are we swab fritters?

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Introduction

Gauze towels and swabs help to keep the surgical field clear of blood and fluid facilitating safe surgery. Ensuring the supply of sterile gauze to operating theatres is both costly and a logistical burden, hence wastage should be kept to a minimum. This study sought to evaluate the utilization and wastage of gauze towels and swabs during elective minor surgery.

Methods

This was a prospective descriptive study conducted from December 2019 to May 2020 in a general surgical theatre of a tertiary hospital. Utilization of towels and swabs was observed for the following procedures: inguinal hernia repair (IHR), paraumbilical hernia repair (PUHR), Jaboulay's procedure (JP) and carpal tunnel decompression (CTD). The pre and postoperative towel and swab counts were documented for each procedure.

Results

A total of 64 procedures were observed. This included IHRs 40.6% (n=26), PUHRs 31.3% (n=20), CTDs 18.75% (n=12) and Jps 9.3% (n=6). The number of gauze towels and swabs issued pre-operatively were 194 and 839 respectively. Utilisation of gauze towels and swabs was 84.02% (n=163) and 71.51% (n=600) respectively. Non-usage of gauze swabs was 29.2% (n=110) for IHRs, 35.7% (n=91) for PUHRs and 18.3% (n=38) for JPs and CTDs.

Conclusion

Significant quantities of gauze towels and swabs, up to a third of those taken, were not used in minor elective procedures. The level of blood soakage of individual swabs and towels was not assessed nor was wastage during major elective surgery. The cost and logistical implications of this wastage and strategies to streamline usage require study.

PP25 - Functional Longitudinal Split Tibialis Anterior Muscle flap to cover exposed Tibia

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Introduction

Mid-tibia exposed wounds pose challenges to reconstructive surgeons, especially when they are complicated with extensive degloving injury and fractures, limiting availability of options.

Methods

Twelve consecutive cases with open Tibia are included where no local fascio-cutaneous flaps or free tissue transfer were possible due to the extent of injury zone. Segmental and comminuted tibial fractures are excluded.

Operative technique

After debridement, periosteal surface of the Tibialis Anterior (TA) muscle is mobilized along the length of the bone exposure. Multiple muscular perforator vessels are safeguarded and a longitudinal split of the muscle fibers is performed down to the tendon, which is then split open to create a flat tendon. This unfolded muscle is advanced over the exposed tibia as the flap and inserted to the periosteum or with another muscle flap followed by skin graft.

These patients were prospectively analyzed for flap viability, dehiscence, graft loss, infection and the dorsiflexion of foot. Mean follow-up is 13 weeks post-operatively.

Results

Age of patients ranges from 17 to 78 years and male:female is 2:1. There are no flap or graft losses. Three minor flap dehiscence with culture positive wound infections have documented, which had been managed conservatively. No further surgeries were needed. In all patients grade 3/5 or above dorsiflexion power is observed 1 - 3 months post-operatively.

Discussion

Functional vertical split Tibialis Anterior flap is a reliable and versatile flap specially when performed with other muscle flaps in patients where most of the other reconstructive options are not applicable.

PP26 - Evaluation of usefulness of outer diameter of vermiform appendix in diagnosis of appendicular pathology

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Introduction

from the earlier decades, the diagnosis of appendicular pathology is challenging in a patient with an acute abdomen. Various scoring systems have been developed to overcome and identify the correct individual to operate. However, in practice, various pitfalls are identified in the score systems as well.

Methodology

A retrospective study was performed in the patients who underwent appendicectomy. Before the surgery, the Alvarado score (AS) was calculated in all the patient's outer diameter (OD) of the appendix was recorded in the histological specimen. Histology was considered as the gold standard. Kruskal-Wallis test used to assess the significance.

Results

Out of the selected individuals (n=52), the mean age was 22.51±15.06 years. There were 9 patients with normal or resolving appendicitis, 20 with acute appendicitis, and 23 individuals with acute suppurative appendicitis or with appendicular abscess. In them the mean OD were 4.55 (4.15-4.96), 7.45 (6.63-8.26), and 9.13 (8.03-10.22) (p < .001) respectively. The Mean AS were 5.66 (4.12-7.20), 6.15 (5.11 – 7.18) and 7.43 (6.78-8.08) (p=.04).

The sensitivity of the OD is 97.7% and the specificity is 100% to detect any sort of appendicular pathology at a cut off value of OD 5.5mm.

Conclusion

OD can be used as a reliable measurement as the AS in the process of diagnosis of appendicular pathology even at the ultrasonography examination. However, the prior expertise clinical judgment would reassure the better outcome.

PP27 - Effectiveness of intra articular platelet rich plasma injections among patients with knee joint Osteoarthritis in Orthopedic clinic at National Hospital Kandy

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Introduction

Osteoarthritis (OA) is the commonest osteodegenerative disease in old age. Intraarticular (IA) platelet rich plasma injection (PRP) is becoming popular more and more since the patient would stand less symptomatic for a few months.

Methodology

A longitudinal study was carried out in the patients with OA knee joint. In all the patients OA grade and initial pain score (using the numerical method) were documented. After the IA PRP injection, the pain score was reassessed in 3 months and 1 year. Wilcoxon signed ranks test was used to assess the significance.

Results

A sample of 29 patients was studied. The mean age of 60.10 ± 7.80 years. Out of them, there were 26 females (89.7%) and 3 males (10.3%). Around half of them (n=14, 48.3%) had grade 2 OA. Initial pain score 6.58 ± 2.17 and 10 patients (34.5%) had a pain score of 8. After 3 months and 1 year of IA injections, the mean pain scores were 2.48 ± 1.86 and 3.44 ± 2.01. There was a significant reduction of pain after the injection in 3 months and 1 year (p<.001, p<.001 respectively). But from 3 months and 1 year, a significant rise of the pain was observed (p<.001).

Conclusion

IA PRP injections are an effective treatment in pain reduction in patients with OA. However, IA injections necessary to be administered several times a year or better analgesic effects.

PP28 - Benign Strictures of Oesophagus; Prospective Study of a Tertiary Care Center in Sri Lanka

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Introduction

Benign esophageal strictures are frequently encountered in gastroenterological practice. However, they are associated with significant morbidity & burden to the health care system. Furthermore, etiology & nature of benign strictures in Asia are deferred to the West. Therefore, analysis of our experiences would be invaluable to improve patient care.

Methods

Study was conducted using a database of the Department of Gastrointestinal Surgery of Colombo South Teaching Hospital. Study period was 2018 January to 2019 December.

Results

32 patients with benign oesophageal strictures were identified during the study period. Twelve had caustic strictures (38%), followed by achalasia 10 (31%), anastomotic 05 (16%), post-radiation 04 (12%) & peptic strictures 01(3%). A total of 77 endoscopic balloon dilatation were performed in these patients.

In the caustic stricture group mean age was 54 (range 25 to 64) with a M:F ratio of 1:2. All the caustic strictures were complex (long ≥ 2 cm, angulated, irregular or with a severely narrowed diameter) & involving upper to mid oesophagus. Multiple strictures were identified in 05 (42%) patients. Caustic strictures were dilated using Through the Scope wire guided balloon dilators under deep sedation. X Ray screening was used during initial dilation of complex strictures. Initial dilatation limited to 10-12 mm with 2-3 increments of size per single session. Procedure repeated 2-4 weekly for newly diagnosed patients, until a maximum of 15 mm diameter is achieved. Subsequent dilatation were performed depending on symptoms. Following dilatation all the patients were observed for 6 hours & discharged on the same day after starting liquids. Dysphagia free period following balloon dilatation varied from 2 to 12 months with an average of 5 months. None of the patients developed perforations or other major complications during endoscopic dilatation.

Out of the caustic strictures, 03 (25%) patients underwent oesophageal replacement surgery during this period & all of them developed anastomotic strictures requiring further treatment including diathermy incisions & flap repair.

Balloon dilatations were carried out in majority of achalasia patients (9 out of 10) as a bridging procedure prior to Heller myotomy. High volume (30 mm) low pressure balloons were used for dilation in achalasia. Radiotherapy for oropharyngeal malignancy was the aetiology of post radiation strictures in our population. After excluding a local recurrence, these patients were managed by serial balloon dilation.

Conclusion

Majority of benign strictures were caustic in our population and managed by multiple dilatations without major complications. Oesophageal replacement for caustic strictures are frequently complicated with postoperative anastomotic strictures.

PP29 - Correlation between Nottingham prognostic index and molecular subtypes in predicting outcome in breast carcinoma

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Introduction

Breast cancer(BC) is the commonest female cancer worldwide and most frequent cancer-related death among females. Histopathological assessment reveals heterogenous nature of BC. BC is classified depending on the molecular behavior in to - Luminal A, B, HER2 Overexpression and Basal Like subtypes (LA, LB, H2E, BL). Nottingham Prognostic Index(NPI -Tumor size(cm)x 0.2 + Nodal status + tumor grade) gives comprehensive prognostic information, without considering molecular subtypes which also gives independent prognostic information.

Methodology

Molecular analysis and NPI were calculated using histopathology reports of index cases performed in a particular period(01-12/2019at DGH Kegalle). Spearman correlation was used to analyze NPI with age and Ki67 status. Mann-Whitney test was used to analyze NPI with molecular subgroups.

Results

Of 37 patients 35(94.6%)had ductal carcinoma NST . The mean age was 58years. The average tumor size was 4cm. 40.5% patients had axillary node positivity. According to the NPI category, 13.5% showed excellent prognosis, while good, moderate and poor prognostic groups had 10.8% ,51.3%, and 24.3% respectively.

The most frequent molecular subtype was Luminal B(59.5%) followed by basal-like the group. There was no significant correlation between NPI with LB, H2E, and BL subtypes, however, Luminal A subtype had lower NPI values($p=0.014$). There was no statistically significant correlation between NPI with age($r=0.185$; $p=0.274$), NPI with Ki67 status($p=0.09$) or with other receptors.

Conclusion

Prognostic information gained by NPI and molecular subtypes were not positively correlated in this study , except Luminal A subtype which has the best outcome showed lower NPI values consistent with better prognosis. This suggests that NPI, Ki67, and subtype labels may be largely independent prognostic factors in the Sri Lankan setting.

PP30 - Comparison of post-operative complications following open inguinal hernia repair under spinal anesthesia versus local anesthesia

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Introduction

Inguinal hernia repair is one of the most commonly performed operations worldwide. Local anesthesia is often included in enhanced recovery protocols and preferred by specialized hernia centres. This study aimed to compare post-operative complications following open inguinal hernia repair under spinal anesthesia versus local anesthesia.

Methods

This descriptive study was carried out in 50 cases of male unilateral inguinal hernia patients. Two equal size groups considered in the study was divided according to the mode of anesthesia; Local and Spinal. Both the groups were assessed post-operatively for surgical site infection (SSI), urinary retention, hematoma formation, nausea and vomiting, headache and testicular pain/swelling. Comparisons between the groups were done using independent-samples t test with IBM SPSS version 23.

Results

Mean age of the sample was 57.06 ± 14.96 years. Out of the patients in 'spinal' group ($n=25$) 20% ($n=5$) were complained of acute urinary retention and none from 'local' group had urinary retention. The difference was statistically significant ($P < 0.05$). 4% ($n=1$) from 'spinal' group and none from local group had SSI and hematoma formation. 12% ($n=3$) in 'spinal' group and 4% ($n=1$) from 'local' group had post-operative nausea and vomiting. None of the patients were complained of headache and testicular pain/swelling. There was no statistically significant association observed in occurrence of SSI, hematoma formation, nausea, vomiting, headache and testicular pain/swelling between 'local' and 'spinal' groups.

Conclusion

Local anesthesia is a safe and efficacious method for open inguinal hernia repair. Large scale studies on its use would provide much more valid results.

PP31 - Comparison of intra-operative and post-operative pain following open inguinal hernia repair under Spinal anesthesia versus Local anesthesia

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Introduction

Inguinal hernia repair is one of the most commonly performed operations worldwide. Local anesthesia for inguinal hernia is often reserved in older patients and those with multiple comorbidities. This study assessed the level of intra-operative and post-operative pain following open inguinal hernia repair with mesh repair under local anesthesia versus spinal anesthesia.

Methods

This descriptive study comprised of 50 cases of male unilateral inguinal hernia patients which were randomly divided into two equal size groups named 'Local' group and 'Spinal' group. The level of pain was assessed using the Visual analogue scale (VAS) for pain (Scoring from 1 to 10) at intra-operatively, 6 hours interval and 24 hours interval. Comparisons between the groups were done using independent-samples t test. Data was analyzed with IBM SPSS version 23.

Results

Mean age of the sample was 57.06 ± 14.96 years. The mean VAS at intra-operatively, 6 hours interval and 24 hours interval were 2.24 ± 1.3 , 1.96 ± 0.84 and 1.84 ± 0.69 in "Local" group and 1.16 ± 0.94 , 3.64 ± 0.86 and 2.48 ± 0.59 in "Spinal" group respectively. The mean intra-operative pain VAS is statistically significantly less in "Spinal" group as compared to "Local" group ($P = 0.002$). The mean intra-operative pain VAS was statistically less in "Local" group (at 6 hrs $P = 0.007$ and at 24 hrs $P = 0.001$)

Conclusion

Local anesthesia is a safe and effective method for open inguinal hernia repair and it provides more post-operative comfort and convenience for patients. Less post-operative pain help patients to return to normal activities early. Large scale studies on its use would provide much more valid results.

PP32 - The Accuracy of C-reactive protein in the diagnosis of acute appendicitis in adults, compared with that of clinical diagnosis: A single unit experience in District General hospital Kalutara

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Introduction

Acute appendicitis is a one of the commonest surgical emergencies presenting to surgical casualties. Usually the diagnosis of acute appendicitis is made clinically by experienced surgeons. Delay in diagnosis of acute appendicitis may lead to complications and overdiagnosis may lead to negative appendicectomies. This study is designed to identify the accuracy of CRP in the diagnosis of acute appendicitis in compared with the accuracy of clinical diagnosis by experienced surgeon.

Methods

All the patients above the 16 years of age, who had undergone appendicectomy from February 2020 to June 2020 in surgical unit A were included and analyzed retrospectively. Data gathered from bed head tickets and histopathology reports.

Results

84 patients were included to the study who was diagnosed as appendicitis by the surgeon clinically. Diagnosis is confirmed by histopathology in 74 patients(88%) and 10 were not inflamed(12%).CRP was more than 6(elevated) in 55 patients(65%), among them 52 had acute inflammation(94%) and CRP was less than 6(Negative) in 29 patients(35%),among them 22(76%) had acute inflammation. CRP had 70% sensitivity and 70% specificity for diagnosing acute appendicitis. Positive predictive value was 96%. The diagnosis by CRP was correct in 59patients (70%) while clinical diagnosis was correct in 88%, the difference is statistically significant. (p value=0.011).

Conclusion

CRP is a useful investigation to help in diagnosis of acute appendicitis with high positive predictive value, but it cannot replace clinical diagnosis by experienced surgeon.

PP33 - A Randomized Controlled Trial comparing effectiveness of bowel preparation using Polyethylene glycol alone and Polyethylene glycol with Phosphate enema in patients undergoing colonoscopy at a tertiary referring centre.

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Introduction

The success of colonoscopy depends on pre-procedure bowel preparation. Inadequate bowel preparation can cause non-detection of significant pathology. Although, Polyethylene glycol (PEG) is the commonly used agent in bowel preparation in some instances it does not provide anticipated bowel preparation. Therefore, some surgeons use Phosphate enema (PE) in addition to PEG, mainly based on expert evidences. Objective of this study was to compare the effectiveness of bowel preparation between PEG alone and PEG with PE in patients undergoing colonoscopy.

Methods

Study was done on patients who had colonoscopies between September and December 2019 at Teaching Hospital Peradeniya. 110 patients were randomly allocated to two groups of 55 each. Control group received PEG alone for bowel preparation while test group received PEG with PE. Quality of bowel preparation of each patient was assessed by a blinded observer using Ottawa Bowel Preparation Quality Scale. Data was processed using SPSS.

Results

There was a significantly better overall bowel preparation in test group compared to control group (p < 0.05). Test group had significantly better bowel preparation in each part of the colon considered separately (p < 0.05). Overall fluid content too was significantly less in test group (p < 0.05).

Discussion

It was concluded that PEG and PE combination was more effective than using PEG alone in bowel preparation for patient undergoing colonoscopy.

PP34 - Analysis of Aetiology, and Management strategies of Urethral Stricture Disease

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Introduction

Urethral stricture disease commonly follows trauma and treatment options include urethral dilatation, internal urethrotomy and urethroplasty. No large-scale studies done in Sri Lanka.

Objective

To determine the aetiology and management strategies adopted in the treatment of urethral stricture disease.

Methods

All patients with urethral stricture disease treated at Urology Unit, Colombo South Teaching Hospital, Kalubowila from 2011 to 2019 were studied. Data related to demography, possible aetiology, treatment and follow up were collected prospectively.

Results

There were 199 patients and 198 were men. The median age was 48.3 years (range: 6-83). Seventy patients (35.2%) were after accidental trauma, fifty-six (26.1%) were after iatrogenic trauma and seventeen (8.5%) were due to Lichen sclerosis et atropicus (LSA) and idiopathic disease were found in forty-one (20.6%) cases. Bulbar urethra alone (48.2%) was the most frequently involved site. Fifty-nine (29.6%) patients had supra-pubic catheterization done at initial setting. Ninety-eight (49.2%) underwent Internal urethrotomy and thirty-three (16.6%) had urethroplasty and thirty-eight (19.2%) had urethral dilatation alone. Thirty-seven (18.6%) patients needed repeated interventions.

Conclusion

Trauma and LSA are the commonest causes for urethral stricture disease in Sri Lanka. According to the need and the circumstance, the appropriate therapeutic option should be selected from urethral dilatation, internal urethrotomy, urethroplasty and perineal urethrotomy.

PP35 - Blood transfusion practices in General surgical wards

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Introduction

Blood transfusion is an important activity in healthcare. Transfusion practices according to WHO guidelines are mandatory for effective and safe patient care. practices are different among hospitals and wards. This study is to describe the transfusion practices at General surgical wards in NHSL.

Method

A descriptive cross sectional study was carried out at General surgical wards at NHSL. Data was randomly collected in patients undergone transfusion in February to April 2020. Interview administered questionnaire was used to obtain informations from patients and house officers. Some data was collected from the BHT.

Results

Among 200 patients, Most of the blood transfusions 110(55%) done for pre operative Hb optimization who had pre transfusion Hb level <7g/dl (54%, n=60). Mean increment of Hb level with 1pint of blood was 0.89g/dl with standard deviation of 0.4965. Decision for transfusion was taken almost equally by consultant surgeon(35%), senior registrar or registrar(32%) and anesthesia team(33%). There was no significant delay between receiving of blood and starting the transfusion and duration of transfusion. Informed consent taken from 86% of patients, But none of these was documented. All were transfused by house officers and only 67% were properly documented. Monitoring during transfusion documented in 82.5% and only few (1.5%) had shown mild transfusion reactions.

Conclusion

Transfusion practices in General surgical wards, NHSL are not completely adherent to the WHO guidelines especially during documentation and monitoring. Intervention needs to improve mainly for proper documentation.

PP36 - Outcome of hypospadias repair in children at a tertiary care centre

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Introduction

The paradigm of hypospadias repair is to create a functionally normal urethra and a cosmetically acceptable penis.

Methods

Patients who underwent hypospadias repair at Lady Ridgeway hospital by a single surgeon from August 2006 to December 2013 and January 2016 to July 2019 were included in the study. The type of hypospadias, surgical technique, post-operative complications and one year follow up outcome were analysed.

Results

170 patients underwent hypospadias repair in this study. Hundred and nineteen (70%) were anterior (70-Subcoronal, 34- coronal, 10 –glandular) , 30 (17.6 %) were penile (13- distal shaft, 7- mid shaft, 10- proximal shaft) and 21(12.4%) were posterior (21- penoscrotal /perineal) hypospadias.

Majority (87.6% [n=149]) of patients underwent single stage anatomical repair and 21 (12.4%) had two stage BRACKA repair.

Following hypospadias repair 23 (13.5%) patients developed urethro-cutaneous fistula, 15(8.8%) had urethral strictures, three (1.8%) had breakdown of glans and two (1.2%) had prepuce oedema.

Hundred and fifty one (88.8%) patients were contacted at one year post-operative. 21 out of 23 (91.3%) patients who developed post-operative fistula had undergone successful fistula repair. Majority (89.4 %) of patients had a subjectively satisfied urine outflow.

Discussion and conclusions

13.5% and 8.8 % of patients developed urethro-cutaneous fistula and urethral stricture respectively, which were compatible with global literature. Majority (89.4%) of patients had a subjectively satisfied urinary outflow at one year follow up.

PP37 - Efficacy of Intra-articular steroid injection to managing joint knee pain in local population in East Colombo region.

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Introduction

Intra-articular (IA) steroid injections are often used for pain relief in patients with joint pain. Last year, we presented a study comparing pain relief from IA steroid injections to the knee joint. We followed these patients up and added a new study to observe the efficacy of the injections as a modality for pain relief.

Method

Patients who presented to the orthopedic clinic from May 2019 to June 2020 with knee pain were included. Three treatment regimens were designed. The first group had Methylprednisolone 40mg, the second 80mg, and third group 40mg and Hyaluronic acid 2ml. All had 0.5% Bupivacaine 10ml. Pain pre-post-injection up to six weeks was evaluated using Numerical Rating Score (NRS). A standard post-injection analgesic regime was given for 5 days to all patients.

Results

A total of 60 patients were evaluated. The average age was 38.45 (Range 34-73). Patients who were given 40mg and 80mg Methylprednisolone showed a similar reduction in pain score with an average drop of 2-4 points at 6 weeks. Patients who were given 40 mg Methylprednisolone with Hyaluronic acid showed higher improvement one-hour post-injection with an average drop of 6 points.

Conclusion

Findings revealed significant efficacy in pain relief following IA injections. Patients who got injected with hyaluronic acid to the knee joint showed a better outcome compared to the other two groups. There was no significant difference between the dose of Methylprednisolone in pain relief of pain.

PP38 - Morbidity following axillary clearance in breast cancer patients of Sri Lanka

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Introduction

The improvement in the life expectancy of women with breast cancer raises important questions on how to improve their quality of life. This study addresses the morbidity related to axillary clearance which is an integral part of surgical treatment of patients with breast cancer with positive lymph nodes.

Methodology

This descriptive cross sectional study included 69 women with breast cancer, who underwent mastectomy /breast conservative surgery with axillary clearance from 2017 to 2020. They represent a single unit at National Hospital Sri Lanka. Arm perimetry was used to assess arm lymphedema which was defined as a 10% difference in the upper circumference between surgical and nonsurgical arms. Range of movement was assessed by the degree of arm abduction. Paraesthesia was evaluated in the inner and proximal arm. Pain and paraesthesia were assessed by questioning the presence or absence.

Results

The mean follow up duration was 20 months. Of the total 69 patients who underwent axillary clearance 59.4% (n=41) complained pain of the ipsilateral arm, 42% (n= 29) had paraesthesia in the inner arm, and 14.5% (n=10) patients had reduced mobility of arm. 8.8% (n=6) patients had arm lymphedema.

Conclusion

Shoulder arm morbidity following axillary clearance is a significant negative outcome which adversely affect the quality of life of patients. Larger studies should be conducted to assess the disease burden in Sri Lanka and to identify risk factors for arm morbidity as timely interventions would be valuable.

PP39 - Effectiveness of bowel preparation for colonoscopy with sodium phosphate enema and bisacodyl vs Polyethylene glycol.

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Introduction

Adequate bowel preparation is critical for successful colonoscopy. The current standard method of bowel preparation with Polyethylene glycol (PEG) has drawbacks such as electrolyte and volume shifts, and low tolerability. The aim of the study is to evaluate and compare the effectiveness of phosphate enema with bisacodyl and PEG.

Methodology

One hundred fourteen patients were randomly assigned for bowel preparation with PEG(n = 61) and phosphate enema following bisacodyl for 3days (n = 53) at DGH Gampaha, from February 2019 to July 2019 .Prospective analysis of data was done in terms of quality of bowel preparation using the Boston Bowel Preparation Scale, pain during the procedure and the sleep disturbance .

Results

The mean age of the sample was 58 years. Caecal intubation rate for PEG group is 95% compared to enema group in which it is 85%. The quality of bowel preparation in right colon is better with PEG compared to enema (P <0.001, CI= 0.31-0.81) overall, but there is no statistical significance (p=0.182) in patients less than 55 years of age in both groups. There is no significant difference in the left colonic (p=0.182) and transverse colonic (p=0.534) quality of bowel preparation. There is a significantly low pain score during the procedure noticed in enema group (p <0.001, CI= 0.47-1.18).

Conclusion/Discussion

Phosphate enema with bisacodyl and PEG is equally effective for bowel preparation in younger patients even though it showed inferiority to PEG overall.

PP40 - Risk Factors for Breast Cancer in Women aged above 40 in Sri Lanka.

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Introduction

Risk factors for breast carcinoma have been studied worldwide, however, there is lack of data about the strength of association in Sri Lankan women.

Objective

To assess the common risk factors in breast cancer among patients aged 40 years and more in Sri Lanka.

Methodology

A descriptive Cross-sectional Study was conducted among 303 breast cancer patients aged 40 years and above at unit 6B of NHSL from March 2019 to July 2020. Data from an interviewer-administered questionnaire were used.

Results

2% (n= 6) of patients diagnosed with breast cancer attained menarche before the age of 11 years while only 6.5% (n= 18) of patients underwent menopause after the age of 55 years. A total of 11.4% (n=15) patients breast fed for less than six months. 2.5% (n=9) of patients used OCP for more than five years and 8.6% (n=24) of patients used DMPA for more than one year while only 1.9% of the patients used HRT. 15.3% of the patients had a relative with breast cancer while 69.7% of them were first degree relatives.

Conclusions

We recommend larger studies to assess for risk factors in breast cancer in Sri Lankan women as some current conventional risk factors do not seem to be relevant to this study population. The identified risk factors with strong associations can be used for effective screening methods.

PP41 - Anatomical variations of the distal short saphenous vein, an ultrasound imaging based study

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Introduction

The Short Saphenous Vein (SSV) runs posterior to the lateral malleolus and courses proximally to end by entering the popliteal vein. The distal end of the SSV is known to terminate

at various levels, at or above the level of the knee joint (KJ). This results in problems during SSV surgery (ligation). This study describes the anatomical variations of the distal SSV.

Methods

This is a prospective study done at the Vascular and Transplant Surgical Unit B, National hospital of Sri Lanka, in July 2020. Patients presenting with varicose veins were included in the study. Patients who underwent previous varicose vein surgeries were excluded. Anatomy was determined by ultrasound scanning using linear probe.

Anatomy was categorised into types 1 to 3. Type1-SSV joins the popliteal vein at the KJ level. This was further divided into 1A (joins posteriorly), 1B (joins laterally) and 1C (joins medially). In type2 SSV joins the medial vein of thigh. In type3 it joins the muscular veins of thigh superior to the KJ crease (posteriorly in 3A and laterally in 3B).

Results

28 limbs were included. 14 (50%) were males. Mean age was 58.42 years (35-72). Commonest type was type1 (81.4%) with 1A in 60.71%, 1B in 14.28%, 1C in 7.14%. Type2 was present in 3.57%, 3A in 10.71% and 3B in 3.57%.

Conclusions

This study confirms that the SSV does not end at KJ crease in 17.9% of cases. Therefore locating the distal end of the SSV ultrasonically is essential prior to surgery.

PP42 - Descriptive survey of patterns of childhood burn injuries in Southern Sri Lanka

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Introduction

Burn injuries and their sequelae are major causes of morbidity especially in the pediatric population. The severity of a burn injury is dependent on the depth and extent of the injury, and its anatomical location. The data on childhood burn injuries in Sri Lanka are scarce. Therefore, we aimed to analyze the patterns of childhood burn injuries admitted to a hospital in Southern Sri Lanka.

Methodology

We retrospectively analyzed children admitted to a pediatric unit in a surgical ward at General Hospital Matara over a period of five months. Data such as age, gender, cause of burn, place of burn injury, total body surface area of burn, anatomical site, length of hospital stay and details of interventions were collected and analyzed.

Result

Out of 32 children, 20 (62.5%) were male with a mean age of 4.5 (1y to 13y) years. Scald burns were predominant (n=29, 87.5%) and all incident occurred in their home environment while living with their parents. Overall mean TBSA was 7.8% (2%-20%) and anatomically, majority of burns confined to chest (n=19, 59%) followed by upper extremities (n=13, 40%). Face and neck involvement was seen among 18% (n=6). The majority of children (n=22, 68.5%) received native treatment before admission and only 31.5% (n=10) received proper first aid. The mean length of hospital stay was 6 days (3-10days).

Discussion

Majority of pediatric burns were preventable. Increasing the awareness of first aid following burns and preventive measures at home environment is necessary.

PP43 - Anatomical Distribution of Lower Extremity Peripheral Vascular Disease

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Introduction

The anatomical distribution of disease burden in lower extremity peripheral vascular disease (PVD) in the Sri Lankan population is yet to be described. In this study we aim to identify the disease patterns and their clinical correlations.

Methods

We evaluated 308 lower limb digital subtraction angiograms done in patients with critical limb ischemia. All were performed during percutaneous balloon angioplasty for limb threatening tissue loss.

Results

The median age of the patient population was 67.00 (29-95) years. 62.7% were males. 88.6% of the patients were diabetic, 11.7% were having chronic kidney disease (CKD) and 59.7% were hypertensive. 13.0% of the study population were smokers. The patterns of disease distribution were as follows,

Isolated aorto-iliac	12	3.89%
Isolated femoro-popliteal	26	8.44%
Isolated distal	119	38.63%
Mixed	151	49.02%

Hypertension was a significant risk factor for involvement of the femoropopliteal vessels (p=0.011) while diabetes was a significantly associated with isolated distal vessel disease (p= 0.038). We did not identify any specific disease patterns associated with CKD and smoking.

Conclusions

In the Sri Lankan population with limb threatening PVD femoro-politeal vessel involvement is more common in hypertensives while distal vessels are affected more in diabetics.

PP44 - Comparison of the quality of colonoscopy performed by consultants and senior trainees at a tertiary care hospital in Sri Lanka

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Introduction

The endoscopist should be skillful enough to perform high quality colonoscopy with minimal patient discomfort and complications. In this study, we compared the quality of colonoscopy performed by consultants and senior residents (SR).

Method

A total of 1950 patients who underwent an initial colonoscopy from Feb 2006-July 2018 at the University Surgical Unit of the National Hospital of Sri Lanka were assessed. The reports were maintained in a standardized computerized database which recorded clinical details, procedural details and findings.

Results

Of the 1950 procedures, 53%(n=1033) were done by senior residents(SRs) and 37.6%(n=733) by consultants. Caecal intubation was achieved in 90.2%(n=932) done by SRs and 93%(n=682) by consultants(p=0.4). Complication rates for SRs was 4.1%(n=42) which mainly included excessive pain(n=13) and bradycardia(n=9); for consultants was 1.09%(n=8) which mainly included excessive pain(n=3). Procedure was abandoned by SRs in 10%(n=104) mainly due to inadequate bowel preparation(n=54) and patient discomfort(n=26); by consultants in 4.9%(n=36) mainly due to inadequate bowel preparation(n=23). Polyps detection rate(PDR) was 10.5%(n=108) and 7.9%(n=58) for SRs and consultants respectively(p=0.5887). The adenoma detection rate (ADR) could not be reported due to the lack of pathological data.

Conclusion

The PDR was higher in SRs probably because of the higher proportion of difficult colonoscopies being done by consultants. However, the rate of complications were less among consultants. Better reporting using objective quality measures like ADR should be incorporated. Further, multicenter analyses are required to standardize the quality in colonoscopy in the local setting.

PP45 - Quality of life in patients with inflammatory bowel disease in a tertiary care hospital in Sri Lanka

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Introduction

Inflammatory bowel diseases (IBD) are chronic disorders of remitting and relapsing nature, needing lifelong treatment and have considerable impact on the quality of life (QOL). This study is aimed to analyse the QOL of IBD patients and identify its contributory factors in a resource limited setting.

Methods

A cross-sectional study was carried out at the Gastroenterology Unit, National Hospital of Sri Lanka. Details on demography, disease characteristics, clinical features and treatment were collected. The QOL was assessed using the validated Short inflammatory bowel disease questionnaire (SIBDQ, range:10-70) and SF-36 (range:0-100). Parametric tests were used to determine statistical significance.

Results

A total of 120 IBD patients (male:female=1:1.14), mean age=44 ±SD15 years) were studied. The majority had ulcerative colitis (UC) (75%,n=90) and rest had Crohn's disease (CD) (25%,n=30). The mean SF-36 scores for general health, physical functioning, bodily pain, vitality, social functioning and mental health were 59.8 ±SD28.4, 70.9 ±SD22.2, 61.2 ±SD24.3, 48.6 ±SD23.2, 76.7 ±SD24.2, 59.6 ±SD23 respectively. The mean SIBDQ score was 54 SD10.9. The QOL of UC was significantly higher than CD in vitality (p=0.004), physical functioning (p=0.01) and mental health (p=0.03). There was significant association with disease activity and SF-36 and SIBDQ scores (p=0.002 and p<0.001). There was no significant association with age, sex, marital status and duration of illness.

Conclusion

Among our IBD patients, we found that CD patients and those with higher disease activity had poorer quality of life. Further studies are required to find out the reasons for low QOL in CD patients.

PP47 - Seasonal Variation in Appendicitis

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Introduction

Acute appendicitis is a common cause of emergency admission and majority require surgery. Like most of other acute illnesses, acute appendicitis has demonstrated a seasonal variation in many regions. However, Sri Lanka is a tropical country, in which seasons are based on rainfall and no studies done in Sri Lanka to ascertain this relationship.

Objective

To ascertain any seasonal variation in acute appendicitis and predict the pattern in the future.

Methods

The study based on the assumption of, number of appendicitis and number of appendicectomies are positively correlate with each other. Monthly appendicectomy count from 2017 January to 2019 December was taken after cross checking with histology. Their correlation was analyzed in SPSS, against the regional meteorological data, collected from Department of Meteorology - Sri Lanka.

Results

Six hundred and sixty-five appendicectomies were considered for the study. Monthly average count was 18.5 (range:10-32). They did not demonstrate any yearly pattern or trend.

Monthly appendicectomy count demonstrated significant [at the 0.05 level (2-tailed)] negative correlation with monthly average minimum temperature (r=-0.353), but, weak positive correlation with monthly average maximum temperature (r=0.081). Monthly average rainfall (r=-0.184) and humidity (r=-0.243) also showed weak negative correlations.

Conclusion

With the results, we can expect least number of cases in cold months. However, other aetiologies including the diet, must be considered in making predictions of the pattern of seasonal variation.

PP48 - Pathophysiology of Recurrent varicose veins after surgery (REVAS) – A Cross sectional analysis at University Vascular Surgical Unit , Colombo .

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Introduction

recurrence after open varicose vein surgery is not an uncommon (20% - 60%) entity and poses a therapeutic challenge to vascular surgeons . An array of sonographical findings may be found according to the underlying aetiology of recurrence . Further treatment must be tailor made accordingly .

Methods

A Total of 23 patients who presented to our clinic with recurrent varicose veins were analysed and assessed with venous duplex .

Results

Mean age was 53.35 and 12 out of 23 were males (52.2.%) .All 23 have undergone open surgery (SF ligation + stripping) 20 patients were found to have truncal great saphenous vein reflux (87%) . perforator reflux and abnormal superficial vein reflux were found in 2 (8.6 %) and 1 (4.3 %) patients respectively .

Conclusion

Principal Pathophysiological factor noted among the group of patients studied was truncal great saphenous vein reflux and other patterns were found in small numbers . Possible aetiological factors could be technical failure during the initial intervention and neovascularization . These findings are comparable with those which are found in literature and should be compared with findings of patients who present with recurrence after endo-venous interventions .

PP49 - Surgical antibiotic prophylaxis: point prevalence study on adherence to guidelines

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Introduction

Surgical antibiotic prophylaxis (SAP) reduces surgical site infections (SSI). The 2016 WHO recommendations and a Lancet systematic review this year re-affirm that postoperative continuation of SAP does not reduce SSI rates

when best practice is followed. Prolonged antibiotic use results in antimicrobial resistance (AMR), adverse effects and financial losses. This study assessed adherence of general surgical units in a tertiary hospital to recommendations on SAP.

Methods

A point-prevalence study was performed on two consecutive days. Patients who had clean and clean-contaminated surgery were included. Data was obtained from general surgical operating theatres and the corresponding wards after 24 hours. Patients were categorized into two groups based on WHO guidelines: SAP indicated (group A) or not indicated (group B).

Results

56 patients with a mean age of 51.52 (26-75) years and male: female ratio of 1:1.94 were included. Group A and B consisted of 62.5% (n=35) and 37.5%, (n=21) respectively. In group A, SAP was continued postoperatively in 80% (n=28), while 45.7% (n=16) had oral antibiotics prescribed on discharge for a mean of 6.25 (5-7) days. The recommended antibiotic was administered at induction in 52.9% (n=18). In group B, SAP was administered at induction in 19.04% (n=4) and continued postoperatively in 47.61% (n=10) while oral antibiotics were prescribed on discharge in 23.8% (n=5).

Discussion & conclusion

Considerable deviation from prescribed recommendations on SAP was observed. However, this study did not assess adherence to best practice during intraoperative antibiotic administration. Institutional antimicrobial stewardship and surveillance is recommended to minimise adverse consequences of inappropriate antibiotic usage.

PP50 - A Study on Surgical antibiotic prophylaxis

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Introduction

A prospective study on surgical prophylaxis was carried out as a part of antibiotic stewardship program in two private sector hospitals. Two months data was analyzed to see the compliance to standard surgical prophylaxis guidelines.

Method

A study Data on surgical prophylaxis for clean surgeries which included, type of surgery, antibiotic given with dosage ,route and time were gathered.

Results

During the study period 263 clean surgeries were performed. The commonest antibiotic given was cefuroxime >60% followed by co-amoxiclav, aminoglycoside, metronidazole, meropenem, Third generation cephalosporins, teicoplanin, ciprofloxacin and levofloxacin.

19.1 % patients received prophylaxis within one hour of surgical incision. 30.9% received at the beginning and 49% received during the procedure. 65% patients, received a single prophylactic dose while others continued prophylaxis.

Discussion/Conclusion

The Commonest antibiotic used was cefuroxime followed by co-amoxiclav and aminoglycosides. Several broad spectrum antibiotics that are not being recommended for prophylaxis were used in many occasions. The goal of surgical prophylaxis is to ensure adequate serum and tissue levels at the time of incision and for the duration of surgery. The optimal time for administration of preoperative doses is within one hour of surgical incision except for vancomycin and fluoroquinolones which are given within two hours. A single dose of antibiotic(s) is sufficient for the clean procedures except for certain major procedures. In this study only 19.1% received antibiotics during recommended time period and 35% received continued prophylaxis.

Adherence to standard surgical prophylaxis guidelines is necessary to prevent surgical site infections and antibiotic resistance.

PP51 - Localization and Surgical Strategy for Insulinomas

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Introduction

Insulinomas, the commonest cause of endogenous hypoglycaemia are rare functional pancreatic neuroendocrine tumours (PNET). Their definitive treatment is by parenchyma sparing excision. The surgical procedure is largely determined by tumour location warranting preoperative localization, often a challenge. This study outlines the management of insulinomas in a tertiary hepato-pancreaticobiliary (HPB) surgical unit.

Methods

A retrospective analysis of prospectively collected data was done of patients with insulinomas who had surgery at a single HPB unit from 2012-20.

Results

A total of 6 patients including 2 with MEN-1 syndrome were included. The mean age was 38.8 years with a male: female ratio of 1:1. Presentation with hypoglycaemic and neuroglycopenic symptoms was early (mean 5.6 months) in 3/6 and late (mean 11.6 years) in 3/6 patients. Preoperative tumour localization was done using CT in 66.6% (4/6) and selective arterial calcium stimulation (SACS) test in 33.3% (2/6). Intra-operative ultrasonographic (IOUS) localisation was done in 33.3% (2/6). Procedures performed included enucleation (2/6), central pancreatectomy (1/6), distal pancreatectomy (1/6), spleen sparing distal pancreatectomy (1/6) and subtotal pancreatectomy (1/6). Morbidity included grade B (1/6) and grade C (1/6) pancreatic fistulae (POPF) and hyperglycaemia 33.3% (2/6). All tumours were histopathologically benign with no disease recurrence to date. The two patients with MEN 1 additionally underwent parathyroidectomies.

Discussion and Conclusions

Cross-sectional imaging was key to pre-operative localization of insulinomas but had to be complemented by invasive methods such as SACS and IOUS. Variability in tumour location necessitated versatility in surgical strategy to preserve parenchyma with good outcome. POPF was a major cause of morbidity.

PP52 - Ultrasonographic assessment of liver size, defining hepatomegaly and factors associated with fatty liver disease in Sri Lanka

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Introduction

Determining hepatomegaly and fatty liver disease plays an important role in clinical setting. Widely available ultrasonography is the modality of choice and used commonly. Objectives of our study were to determine the liver size, hepatomegaly, factors affecting the liver size and to identify the factors associated with fatty liver disease among Sri Lankan population.

Methods

We randomly selected patients who underwent ultrasonography for routine health checkup and for non-liver related diseases in radiology clinics (n=508). Anthropometric parameters, co-morbidities and alcohol consumption were

recorded. Maximum liver span at mid clavicular line(MCL) was recorded and fatty liver disease and its grades were recorded ultrasonographically by specialist Radiologist.

Results

Average age was 48.23±15.24. 320(63%) were males and 188 were females. Mean maximum liver span at MCL was 10.89±1.20cm, ranging from 6.55 to 15.36cm. Gender, age, height, weight, body mass index(BMI), body surface area (BSA) and fatty liver showed significant correlation with liver span while metabolic diseases and alcohol consumption didn't correlate. Ultrasonographic detection of fatty liver(FL) recorded in 309(60.82%) subjects. 56.36% of patients had non-alcoholic fatty liver disease amongst males were significantly high(n=165). FL is significantly high in patients with metabolic disease and correlate significantly with BMI.

Discussion/Conclusion

Our study revealed the significant variation of mean liver size in Sri Lankan individuals with that of western values(13.9±1.7cm,15.06±1.5cm). We recommend value above 13.5cm at MCL to be considered as hepatomegaly in Sri Lankan adults. Fatty liver disease is becoming increasingly common among Sri Lankan population and screening need to be addressed.

PP53 - Correlation Between ISUP Nuclear Grading and Tumour Characteristics in Clear Cell Renal Carcinoma – Single Unit Experience Over 5 Years in a Tertiary Care Hospital

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Introduction

Renal cell cancer represents 2-3% of all Cancers and 75-85% are Clear Cell Renal Carcinomas. In 2012, the International Society of Urologic Pathologists (ISUP) proposed a novel, validated grading system for clear cell renal cell carcinoma (ccRCC) and papillary renal cell carcinoma (pRCC) that has been implemented by the WHO. The ISUP/WHO grading system has been shown to provide superior prognostic information compared with the Fuhrman grading system specially in regards to grade 2 and 3. No data is available regarding the correlation in Sri Lankan setting.

Methodology

Retrospective analysis of all patients' with Histologically proven Clear Cell RCC, over a period of 5 years from 01/09/2014 to 31/08/2019 was carried out.

Results

Out of 51 patients 49% had ISUP grade 2 cancers while 35.3% had grade 3 cancers. 7.8% each had grade 1 and 4 cancers. Of the Grade 3 tumours 44.4% were >7cm in the widest diameter compared to 28% of Grade 2. Renal vein involvement was 28% and 38.9% and presence of tumour necrosis was 44% and 83.3% in grade 2 and 3 respectively. 80% of IUSP grade 2 patients had R0 resections while 77.8% of IUSP grade 3 patients had R0 resections.

Discussion and Conclusions

ISUP Nuclear grading correlates well with other parameters with prognostic value in ccRCC patients in Sri Lankan setting.

PP54 - 2.5% Povidone Iodine Solution for Skin Graft Bed Preparation – Preliminary Observational Study

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Introduction

Bio membrane associated with longstanding wounds is a determining factor for the split thickness skin graft(SSG) survival even with negative wound culture. Thus we have identified the need of an antiseptic solution in graft bed preparation.

Method

We designed an observational prospective study to evaluate our practice of using 2.5% povidone iodine solution in SSG for large (>5%) chronic wounds with or without flap cover. After a good debridement wound was irrigated with adequate amounts of 2.5% povidone iodine saline solution. We prepare this solution by removing 125ml from one bottle (500ml) of normal saline and replacing same volume with 10% povidone iodine lotion, freshly prepared in each procedure.

After irrigation, wound bed is reexamined for povidone iodine stained tissues which are dead, thus repeat debridement was done followed by cycles of irrigation and debridement. When the bed was clear it's mopped with saline soaked swabs before applying SSG. SSG take was measured as a percentage at the end of 7 and 21 days.

Result

13 consecutive patients were included in our study in 4 month duration. Eight patients had leg wounds, 4 upper limb and 1 scalp wound. Age ranged from 17 to 79 years and none had significant uncontrolled co-morbidities.

In all patients 7 day graft take was > 99% and 21 day success was >95%. No graft infection was noted and subsequent graft maturation and rehabilitation was uneventful.

Discussion

2.5% povidone iodine solution gives promising results in SSG but need further research and clinical trials.

PP55 - Surgical management of breast & axilla in early breast cancer- A descriptive study in a tertiary care center
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Introduction

Early breast cancer is defined by NCCN stage I&II which classified by AJCC TNM staging system. It surgically managed with the wide local excision (WLE) or mastectomy along with the management of axilla either sentinel lymph node biopsy (SLNB) or axillary lymph node dissection (ALND). Breast conservative surgery or mastectomy with reconstruction is ideal management for early breast cancer balancing oncological & cosmetic outcome.

Methods

This study was carried out among patient during 6 months since January 2020 in national cancer institute Maharagama. Axillary status of clinically lymph node negative disease preoperatively assess by SLNB by using methylene blue. Statistical data analysis carried out by SPSS software.

Results

340 patients have undergone surgical treatment. Among them 82% were mastectomy & 18% were WLE. Immediate reconstruction with autologous flaps carried out for 3% of patients. 80% of patients with clinically positive nodal disease of axilla preoperatively underwent ALND. Rest of the patients undergone SLNB among them 40% positive SLN & proceed with ALND.

Discussion and Conclusions

Standard surgical care of early breast cancer is to have minimal morbidity, acceptable cosmetic outcome without compromising oncological outcome. Our study shows there is a lack behind offering surgery with minimal morbidity and measures has to be taken to improve cosmetic outcome.

PP56 - The role of the stoma therapy unit on ostomates

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Introduction

Stoma therapy incorporates perioperative management as well as psychosocial support and rehabilitation of the ostomate, which can be lifelong. Auditing the functions and services of the stoma therapy unit will help to improve the quality of stoma therapy services.

Methods

This descriptive study was done in the stoma therapy unit at the provincial hospital Kurunegala from 01.04.2019 to 31.03.2020. Data was retrieved from the stoma therapy register.

Results

Total of 198 ostomates were registered (Male 56%). Age range was 1 month – 96 years. 170 (85%) had colostomies while rest included ileostomies (10.6%), urostomies, and entero-cutaneous fistula. Colorectal carcinoma (88%) was the most common indication for stoma creation. 144 (72%) were temporarily stoma and 16 cases were reversed during this period. Only 7% of patients were referred preoperatively and the rest of patients were referred postoperative period (45%) and on discharge (48%). Complications identified and managed included peristomal skin complications (22%), prolapse stoma, stoma retraction and parastomal hernia.

Monthly free bag consumption was 500. The median number of patients weekly review was 55. Patients and staff education programs were implemented using booklets and awareness programs. An annual workshop on stoma care was conducted at peripheral hospitals. Outreach and home visiting services were recently initiated.

Conclusion

Holistic stoma care should be provided from the preoperative period until stoma reversed or for lifelong in a permanent stoma. Auditing the stoma therapy unit will help improve patient care as well as compare our practice with peers and standard care.

PP57 - Ultra-Thin Pedicle Groin Flap in Finger Reconstruction Surgery

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Introduction

Groin flap is well known for hand reconstruction. But bulky fatty layers greatly limit its use in finger resurfacing. We describe an ultra-thin groin flap in this short series.

Method

Three patients; one 10year old boy with electrical injury to right little finger and 26 and 42year old gentlemen with finger crush injury needing finger resurfacing; were selected after informed consent.

Operative surgery – This groin flap is based on perforators of the Superficial Circumflex Iliac Artery(SCIA) around Anterior Superior Iliac Spine(ASIS); usually a dominant perforator through the Sartorius muscle; which were marked by the hand held Doppler. Through an exploratory incision 1cm bellow ASIS, perforator size, quality and branching pattern was identified. Appropriate size flap was then marked based on one of those lateral ascending subcutaneous branches of the perforator. Anterograde flap dissection was done, under 3.5x magnification, including only the identified branch vessels and its subdermal vascular plexus, thus harvesting an ultra-thin axial pattern flap containing only skin and subdermal fat.

Flap was inserted to the finger defect; edge to edge with good skin without any difficulty. Flap separation was done in 3weeks but delaying was done in one patient.

Results

All patients had excellent outcome though one had distal flap congestion which was managed with adjusting the hand position. De-bulking wasn't needed in any and all were happy about their groin scar. Finger stiffness was seen in adult patients.

Discussion

Ultra-thin groin flap is a successful flap in finger resurfacing, yet more research is needed.

PP58 - A report of 26 cases with subcutaneous Dirofilariasis (worm granuloma): An underrated differential diagnosis for subcutaneous lumps

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Introduction

Even though subcutaneous dirofilariasis (worm granuloma) is an emerging zoonosis, it is not commonplace to consider it as a differential diagnosis for a subcutaneous lump even in the endemic zones. Moreover, the available literature lacks attempts to provide a unified clinical profile for it to be considered as a clinical entity.

Methods

We have retrospectively analyzed patients who were diagnosed with subcutaneous dirofilariasis at a Base Hospital in the Uva Province of Sri Lanka from February 2018 to March 2020. We evaluated patient demographics, symptomatology, clinical signs, ultrasonographic and histopathological features.

Results

Twenty six patients with a mean age of 15.6 years (range 1 – 67 years) were analyzed. The locations of the lumps were highly variable, the commonest being the abdominal wall (34.6%). Most (84.6%) were asymptomatic. Average diameter was 14.2mm (range 8 – 25mm). Majority were neither tender nor warm, firm and had ill-defined margins and a smooth surface without fluctuation, transillumination or slipping sign. All were in the subcutaneous plane often attached to deep fascia but without attachment to the skin. Blood investigations were unremarkable with a normal ESR and eosinophil count. Ultrasonographic finding was an echogenic tubular structure within a hypoechoic lesion. Histopathology demonstrated a worm surrounded by granulomatous inflammatory infiltrates with eosinophils and lymphocytes.

Discussion and conclusions

We emphasize the importance of not disregarding subcutaneous dirofilariasis as a differential diagnosis for subcutaneous lumps, especially in the highly prevalent geographical zones to minimize 'incidental diagnosis'.

PP59 - Pathological characteristics and Immuno-histochemical features of breast cancer in a cohort of Sri Lankan females.

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Introduction

Breast cancer is the commonest cancer among Sri Lankan women. Although a decline in the incidence of breast cancer is documented in developed countries, developing countries continue to show a rising trend of incidence.

Method

A retrospective study was done in Teaching Hospital Kurunegala using 249 patients who underwent surgery for breast cancer from October 2018 to June 2020. Data was collected from clinic notes and histopathology reports. Patients were divided into two age groups, young (<45years) and old (>46years). These were compared according to histological type, tumor grading, hormonal receptor status, Her2/neu status, tumor size, presence of tumor necrosis, lymphovascular invasion, and in-situ component.

Results

In this study 95.9% had invasive ductal carcinoma and 3.2% had invasive lobular carcinoma. 0.8% had minor histological variations.

In the young group prevalence of invasive ductal carcinoma was 97.8% and none had invasive lobular carcinoma. In the older group, prevalence of ductal and lobular carcinoma were 95.5% and 3.9% respectively. 28.5% had triple negative breast cancer and triple negativity among young and older groups were 31.9% and 27.7% respectively.

Mean tumor sizes were 3.13cm and 3.19cm in young and older groups respectively. 34% of young women and 32.6% of older women had histologically Grade 3 tumors.

Conclusions

Invasive ductal carcinoma was the commonest histological type. A significant number of tumors were histologically Grade 3. Triple negative rates were higher among young women. There was no significant difference in the mean tumor size, lymphovascular invasion, presence of tumor necrosis, and in-situ component, among the two groups.

PP60 - Analysis of CT Features and postoperative outcome in patients who underwent Decompressive Craniectomy after Head Injury

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Introduction

Increased intracranial pressure (ICP) is a silent killer in traumatic brain injury. Decompressive Craniectomy is a first line therapeutic modality for refractory elevations in ICP.

Objective

To evaluate Computed Tomographic (CT) findings, to predict the outcome following decompressive craniectomy.

Methods

Data was collected from the Neurosurgical Unit in Teaching Hospital Karapitiya, during February and March in 2019. All decompressive craniectomies following trauma, were considered. Their demographic data, presenting history, CT findings and outcomes were analyzed.

Results

Out of 44 Decompressive Craniectomies, majority [n=33 (75%)] were due to trauma and non-traumatic cases were excluded. Median age was 41.2 (16 - 86) and majority were men [n=28 (84.84%)].

Motor vehicle accidents accounted for the majority [n=24 (72.7%)], followed by assault (18.2%), falling from a height (6.1%) and train accidents (3%). Overall indoor mortality was 30.3%.

An increased mortality was observed with a higher mid-line shift (11.8% in no shift to 57.1% in >5mm shift) and basal cistern effacement in CT Brain (0.0% in no effacement to 46.2% in absent cistern). Mortality was 0% when sulci and gyri were patent, compared to 31.3% in obliterated cases. Mortality when Gray white demarcation is preserved was 16.7%, compared to 33.3% in fully effaced cases. Both Marshall (1=0.0% to 6=35.7%) and Rotterdam (1=0.0% to 5=37.5%) CT scores demonstrated increase mortality with rising score, but Helsinki score failed to demonstrate any relationship.

Conclusion

Clinical correlation is essential in prognosticating patients after head injury in addition to CT findings.

PP61 - Cost of venous ulcers: Experience in a peripheral vascular centre

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Introduction

Chronic Venous ulcer (CVU) is the commonest cause of ulcers in vascular clinic setting at the Teaching Hospital Anuradhapura (THA). CVU results in cost to the patient, family and earning loss. This study aim to assess the average cost for managing venous ulcers of patients attending vascular clinic at THA.

Methodology

Cross sectional descriptive study. Data on patient demography, area of residence duration of CVU, cost of travelling and dressings, occupation were collected over telephone conversation. Patients who did not respond to telephone calls and patients having arterial, neuropathic and combination ulcers were excluded.

Results

Total of 24 patients were included. 15 were males (62.5%). mean age was 57.2 years (26 to 80). 75% patients underwent at least one intervention(endo venous ablation, surgery or sclerotherapy) . Median duration of venous ulcer is 2 years (0.25 – 15). Average distance from THA is about 39.2 kilometers. Mean yearly expenditure is about 59937.5 Rupees (21500-130000).

Discussion and Conclusion

Because of the complex nature of the costs involved, expenditure by a patient is most probably more than the above motioned amount i.e 59937.5. because expenditure involves loss of earning of carers, travelling cost of carers and many additional costs. Therefore we think that educating on home based dressing techniques and less frequent visits to clinic, Training staff at rural hospital will improve the situation.

PP62 - Initial results of Ligation of Intersphincteric Fistula Tract (LIFT) procedure at a tertiary care centre.

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Introduction

Ligation of intersphincteric fistula tract (LIFT) is a novel surgical treatment method devised to treat peri anal fistulae. We started to offer this technique to treat patients with peri anal fistulae at our institution recently in 2019. The aim of our study is to assess the results of this novel method in initial set of patients who have undergone LIFT at our hospital.

Methods

Patients who have undergone LIFT procedure from June 2019 to January 2020 were followed up prospectively. Anatomical details of the fistula tract were recorded at the time of the surgery. All procedures were done by a single surgeon.

Results

Nine male and two female patients had LIFT during study period. They were followed up for a median follow up period of 41 weeks (Range 28 – 60 weeks). Out of total eleven, nine were transsphincteric while the rest were intersphincteric. Six fistulae had internal opening at six o'clock position while two had at 12 o'clock position. Eight of internal openings were located at the level of the dentate line while rest were located above the dentate line. Majority, nine out of eleven, had horseshoeing of the tract and all of them were located in the ischiorectal fossa. Three patients had recurrence (27%).

Discussion

LIFT can be used successfully to treat our patients. Initial success rate of LIFT procedure at our institution is comparable to internationally published data.

PP63 - Could nerve conduction study result replaced by a clinical questionnaire when diagnosing carpal tunnel syndrome.

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Introduction

Carpal tunnel syndrome (CTS) is a common entrapment neuropathy. Routine practise of obtaining a nerve conduction study (NCS) to confirm the clinical diagnosis may significantly delay the surgical intervention as this facility is not widely available. Our study aimed to assess if a clinical questionnaire could reliably predict NCS results in diagnosing CTS.

Methods

68 patients who underwent carpal tunnel decompression (CTD) at orthopaedic clinic National Hospital Sri Lanka from January 2019 - September 2019 were given the Kamath & Stothard CTS clinical questionnaire All patients had positive NCS results.

Results

Mean age of presentation was 52 years (range 34 to 70 years) with a female to male ratio of 2 : 1.

6 patients had bilateral CTS.(8.8%). Mean duration of symptoms up to clinic presentation was 7/12. 55 patients had a score of five or more(80.9%). 13 patients scored 4(19.1%). None scored less than 4.

Discussion and conclusions

Study results suggest questionnaire could be used as a reliable diagnostic tool replacing NCS in CTS with implications for reduction in waiting times for surgical intervention. Validity of study results could be improved by including a sample of patients who had negative NCS results.

PP64 - Low Ligation of Inferior Mesenteric Artery with Apical Lymph Node Dissection after Neoadjuvant Chemoradiation in Rectal Cancer Surgery

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Introduction

Low ligation of the inferior mesenteric artery (IMA) preserving left colic artery, with lymph node dissection up-to IMA origin (LL-IMA) is an alternative to high ligation of IMA (HL-IMA) in rectal cancer surgery for lymph node clearance. An additional benefit is less vascular compromise on proximal bowel end. Neo-adjuvant chemoradiotherapy (naCRT) improves resection margins but reduces lymph node yield. This study describes the pathological outcome of a cohort of patients with rectal cancer who had naCRT followed by surgery with LL-IMA technique.

Methodology

All rectal cancer patients who underwent surgery following naCRT with total mesorectal excision and LL-IMA over 15-month period (2018 – 2020) at a single unit in Apeksha Hospital were retrospectively evaluated regarding resection margins & lymph node yield.

Results

Among 25 patients meeting criteria (mean age 60 years, 11 females, 14 males), 13 underwent anterior resection (AR) and 12 underwent abdominoperineal resection (APR). Median lymph node yield was 8 (range 0 to 25), the median for AR and APR were 5 and 8 respectively. Only 4 patients had positive nodes. All surgical resection margins were clear. Median of distal resection margin was 15 mm (5 – 30 mm).

Conclusion

Lymph node yield in this cohort is comparable with global data and published local data of HL-IMA after naCRT. Therefore, LL-IMA appears to yield adequate lymph node clearance with potential added benefits over standard technique. The ongoing follow up study of these patients would reveal long term outcomes.

PP65 - Retrospective Descriptive Study on Correlation between MRI Findings, Frozen Smear, and Histological Diagnosis of Primary Brain Tumors

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Introduction

Primary brain tumors represent 1.5% of all cancers. WHO classifies according to cell origin and histological grade, from Grade 1 - 4 (benign - high grade malignancy).

Magnetic Resonance Imaging (MRI) plays vital role for diagnosis of primary brain tumors even though the diagnostic investigation is histopathology.

Introduction

To describe correlation between MRI diagnosis, frozen smear diagnosis, and histopathological diagnosis.

Methods

Retrospective descriptive study of primary brain tumors at the National Hospital of Sri Lanka between March and August of 2019. Results were analyzed using SPSS 21.

Results and conclusion

Total of 234 primary brain tumors were identified, 34.2% were gliomas, 30% were meningiomas, and 12.2% were pituitary tumors. Among 234, 145 (61.2%) were females and 92 (38.8%) were males. 53.2% had signs of increased intracranial pressure, 20.3% had fits, and 37.6% had focal neurological signs. In females, 40% of tumors were meningiomas while 22.8% were gliomas. In males, it was 14.1% and 52.2% respectively.

Once graded, 34.6% were Grade 1, 18.6% were Grade 4. 77.5% of meningiomas were Grade 1, while 50.6% of gliomas and 50% of neuroepithelial tumors other than gliomas were Grade 4.

In conclusion a majority of 76.4% (181) MRI findings correlated with histological findings, while 59.1% (140) of frozen smears correlated with the histology. MRI of, 88.7% of meningiomas, 71.6% of gliomas, 66.7% of neuroepithelial tumors except gliomas, 78.6% of extra axial tumors except meningiomas, and 93.1% of pituitary tumors correlated with histology.

Outcome of this study is comparable to similar major studies' findings.

PP66 - Study on immunohistochemical analysis of receptor status in breast cancer

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Introduction

Immunohistochemical analysis of receptor status in breast cancer is carried out to decide the systemic treatment modalities and prognostication of breast cancer. The Classification of breast cancer into different molecular subtypes using immunohistochemistry as a surrogate to DNA microarray technology has been identified and categorized into 4 molecular subtypes according to the Cancer Genome Atlas Network (TCGA): Luminal A (Estrogen receptor (ER), Progesterone receptor (PR) - positive, HER2 - negative), Luminal B (ER - positive, PR - positive & HER2 - positive), Basal type (Triple negative) and HER2 enriched (ER - negative, PR - negative & HER2 - positive).

Methods

A descriptive retrospective study design wearing 380 breast cancer cases underwent mastectomy and Wide local excision (WLE) at National Cancer Institute, Maharagama for six months between January 2020 to June 2020 were reviewed. Immunohistochemical analysis were done on tissue samples obtained by core biopsy prior to surgery or post surgical specimen if not done preoperatively.

Results

During this period 380 patients underwent surgical treatment for breast cancer. Among them 70.5% mastectomy were carried out and 29.5% were wide local excision. 84% underwent Immunohistochemical analysis preoperatively with core biopsy specimen. Rest 16% analysed post operatively. Based on TCGA, the outcome of the study revealed Luminal A 64.5%, Luminal B 9.2%, Basal type 11.8% & HER2 enriched 14.5%.

Conclusion

In our study we have found 16% of patients weren't undergone Immunohistochemical analysis during preoperative analysis of trucut biopsy. The majority of the patients have good prognostic tumor type with Luminal A & B while aggressive tumor types with Basal type and HER2 enriched type are very low. Both aggressive types commonly found in age less than 50 years.

PP67 - Young colorectal cancers (<45 years) treated with a curative intent have a better overall survival compared to the older population; North Colombo experience.

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Introduction

Colorectal cancer (CRC) has the fourth highest incidence amongst cancers in Sri Lanka. Although CRC is considered a disease of the elderly, there is a shift towards young cancers globally. Despite the increasing incidence there is a scarcity of data from the South Asian region. This study aims to analyze the clinicopathological features and long-term survival of young CRC patients.

Method

Patients treated for CRC at the Professorial Surgical Unit at Colombo North Teaching Hospital during 1997- 2017 were prospectively followed up. Demographics, tumour characteristics and survival data were recorded. Age less than 45 years at diagnosis was considered as a young cancer. Overall survival among the populations was compared using Kaplan-Mire survival curves. A P value of <0.05 was considered significant.

Results

From a total of 682 CRC patients treated with a curative intent, 113 (16.5%) were young cancers (Mean age - 36.35 years; range 17-45, female - 53.1%). Rectum (60.2%) was the commonest site followed by the right (24.8%) and left colon (15%). Commonest histological type was moderately differentiated adenocarcinoma (72.4%). Seventy percent had locally advanced disease (T3/T4) with 53.2% having positive nodal status. Of the total 27% received neo-adjuvant treatment and 66.7% received adjuvant treatment. Young patients had a significantly better overall survival compared to older counterparts (P=0.008).

Conclusion

Young CRC accounts for a significant proportion of the CRCs compared to global rates and the majority are left sided. The overall survival is better compared to the older population in this cohort.

PP68 - A study on quality of operative notes in a tertiary care center

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Introduction

Operation notes writing is one of the fundamental parts of the surgical practice. It should be accurate, clear and informative and contains all the events and steps in the surgical procedure, to be of value when used in further follow-up or in medico legal conditions. The Royal College of Surgeons in England published guidelines in 2008 outlining the information that should be documented at each surgery.

Operative notes are often presented in legal malpractice cases, and studies have shown that up to 45 percent of operative notes are indefensible medico legally.

Methods

A three months retrospective descriptive study (1 st january 2020 - 31 st March 2020) evaluated a total of 126 operative notes based on parameters described by the Royal College of Surgeons guidelines in terms of date & time of surgery, surgeon, procedure, operative diagnosis, mode of anesthesia, incision details, operative finding , detail of closure, post-operative instruction and signature.

Results

Majority of operative notes were written by Medical officer (72%). Mode of anaesthesia not documented in 8% of cases. Date of surgery, name of the surgeon, procedure, post-operative plan were documented in all cases. The operative diagnosis and post operative instructions were frequently not documented in the designated location. Incision details were not included in 8% of cases while the tourniquet time was not documented in any.

Conclusion and discussion

Completion and documentation of operative procedure were good in some areas. Zero compliance was noted in tourniquet time and time of surgery. improvement is needed in documenting tourniquet time, methods of closure and quality of hand writing.

PP69 - Effectiveness and student acceptance of Multi-consultant panel discussion for surgical undergraduate teaching; lessons learnt during the COVID-19 pandemic

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Introduction

Medical education has changed significantly over the past few years from fragmented and didactic teaching to transformative learning. Lack of clinical sense and interest in clinical practice among students is a criticism towards the new curriculum. We experimented multi consultant discussion panels as a mode of teaching to develop student interest in clinical surgery while broadening their knowledge.

Method

During the COVID19 pandemic online learning activities were carried out using free to use meeting platform. Each discussion involved 3-5 consultants and students from all stages (year 1-5; attendance->250). Discussions explained from basic sciences to advanced clinical management in each topic. Periodic feedback was sought from the students using as online form with agreement levels and likert scales.

Results

A total of 1047 student responses for 7 questionnaires were analysed. A total of 24 topics were discussed during 52 contact hours within 6 weeks. Over 95% of the students had either participated for all or most of the sessions. Over 90% agreed that the discussions were both relevant and important. A majority (87.1%) of the students 'definitely agreed' that they benefited from the activity. Highest level of agreement was expressed by 83.4% that the discussions helped to improve their clinical sense, and 79.3% agreed that their interest in clinical surgery was improved.

Conclusion

Multi-consultant panel discussions are an effective method to teach surgery to undergraduates and is well accepted. Feedback data concluded that the activity meet the learning objectives while improving the clinical sense and interest among the students.

PP70 - Spinal trauma : A retrospective descriptive study in an orthopedic unit of National Hospital of Sri Lanka (NHSL)

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Introduction

This study aims to characterize the demographics, aetiologies and injury pattern of a cohort of spinal trauma patients.

Methodology

Data from 30 patients who were admitted to NHSL over a period of 4 consecutive months (4/2020-7/2020) were analysed. Patient interviews and bed head tickets were used to gather data.

Results and Analysis

Male patients accounted for 90% of cases. Proportion of patients between 41-60 years was 60%. Road traffic accidents (RTA) accounted for 36% while 50% were due to falls. RTAs due to either motorcycles or three wheels accounted for 80% of cases. Majority of the cases were transfers (93%). Cases identified as ASIA- A on presentation represented 46%. Proportion of patients with neurological deficits but with no abnormality in CT was 30%. Cervical spine was affected in 50% of cases. Incidence of non-spinal injuries was 36%. Incidence of neurogenic shock was 23%. Spinal surgery was needed in 53% and out of it in 56% of patients surgery was done within 2 weeks. Patients without financial and social support were 46%.

Discussion and conclusion

Majority of spinal trauma victims being in working-age and having dependents is a concern from a socio-economic point of view. The trauma incurred due to motorcycles and three wheels are preventable and therefore need strict regulations. Cervical spine is most commonly affected and needs careful evaluation. There was no undue delay in definitive management. A financial support mechanism is needed for most of the patients in recovery and rehabilitation.

PP71 - Clinical Presentation, Evaluation and surgical outcome in primary hyper parathyroid patients undergoing Parathyroidectomy.

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Introduction

Primary Hyperparathyroidism is a less diagnosed clinical condition due to variation in clinical presentation. Sri Lankan studies analyzing cases of hyperparathyroidism are scarce.

Methods

Descriptive data from all primary hyper parathyroid patients underwent Parathyroidectomy at National Hospital Kandy, Provincial Hospital, Badulla and Provincial General Hospital Kurunegala over the period of 4 years (from 2016) were collected using clinical records.

Results

A total of 17 patients were analyzed. 11 were females. Ages ranged from 23 to 71 years. (Mean age - 44.6). Mode of presentation was fragility fractures in 4 patients, renal calculi in 6, recurrent acute pancreatitis in 1 and psychiatric manifestations in 2. Pre-operative total serum calcium levels ranged from 2.53 to 3.54 mmol/L with a mean of 3.158 mmol/L. serum PTH levels were high in all patients.

X-ray evidence of skeletal changes of the hands was seen in 6 patients, out of which 4 showed bony deformities, 2 of which showed additional pathological fractures. Renal calculi/nephrocalcinosis was found on X-ray KUB in 5 patients and in USS KUB in 6 patients. Ultrasonic imaging of parathyroid revealed a parathyroid adenoma only in 13 patients. Tc99 Sestamibi scans were performed in 8 patients. Histological analysis revealed 13 parathyroid adenomas, 1 parathyroid carcinoma, 2 hyperplasia.

Out of 17, 15 patients got cured after primary surgery but 2 needed repeated surgical interventions as the Hypercalcaemia was persistent.

Conclusion

Majority of patients presented with renal and bone complications. Ultrasound scan has a limited role in localizing Parathyroid glands. Histologically the majority was parathyroid adenomas.

Sestamibi scan and intra operative PTH monitoring would aid in reducing the re-operating rates.

PP72 - Clinical characteristics and short-term outcomes of bypass surgery for chronic limb threatening ischemia (CLTI) in lower limbs, in a tertiary care unit in Sri Lanka.

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Introduction

Data on outcomes of major vascular interventions for chronic limb threatening ischemia (CLTI) in lower limbs in developing countries is limited. This study was aimed to analyze the clinical characteristics, outcomes and their associated factors among patients who underwent bypass surgery for CLTI in a tertiary care unit.

Methodology

Patients who underwent bypass surgery for CLTI from April 2019-January 2020 were analyzed prospectively at the Vascular department, Teaching Hospital Karapitiya. Outcomes were assessed in terms of ankle-brachial pressure index (ABPI) and SVS Wifl scores at an average follow up of 6 months. Non-parametric correlations and Mann-Whitney U test were used for statistical analyses.

Results

A total of 54 [male=31, 57.4%, median age=68(range:25-82)] patients were analyzed. Diabetes, hypertension and smoking were seen among 77.8%, 64.8% and 46.3% respectively. All presented with lower limb wounds with a median Wifl score 4(range:2-4). Type of bypass surgeries included femoral-popliteal (n=30, 55.6%), popliteal-distal (n=19, 35.2%), aorto-unifemoral (n=2, 3.7%), aorto-bifemoral, femoral-femoral crossover and axillo-femoral in 1 each (1.9%) using autologous grafts in the majority (n=47, 87.0%). After an average of 6 months, 3.7%(n=2) had major amputations, 13%(n=7) died, and 5.6%(n=3) were lost to follow up. Of the remaining, the ABPI [(median:0.52, range:0.00-5.70 to 0.68, range(0.00-6.40), p<0.001] and Wifl scores [(median:4.0, range:2.0-4.0 to 1.0, range(0.0-4.0), p<0.001] had significant improvement after surgery. There was no association with age, sex, comorbidities and type of surgery with the improvement in the scores.

Conclusion

The majority of lower limb bypass surgery provides good outcomes in patients with CLTI and having high Wifl score, irrespective of the age and comorbidities.

PP73 - Clinical and demographic assessment of pancreatic cystic neoplasms (PCN) in patients at university surgical unit, Colombo South Teaching Hospital

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Introduction

To assess the clinical and demographic data and compare with worldwide data of patients who are diagnosed with PCN.

Methods

Retrospective study of data from 2018 to 2020, of a tertiary referral unit. Patients diagnosed of PCN were assessed with regards to clinical presentation, demographic data, imaging findings, surgical procedure and histopathological diagnosis.

Results

Forty-five patients were diagnosed with PCN. Male: Female was 1 : 3. Mean age at diagnosis 50 years. Thirty-five per cent were incidentally diagnosed. There were MCN (22%), IPMN (17.8%), SCN (15.6%), SPN (11.1%), indeterminate (28.9%), neuroendocrine (2.2%) tumours. Commonest location for cyst formation was the head (40%). Mean age at diagnosis was – MCN (50y), SPN (35y), SCN (56y), IPMN (61y). There was a female preponderance in all types except IPMN. 11 patients underwent EUS. High cyst fluid CA 19.9 levels (2 patients). High CEA levels (2 patients). High mucin level (one patient). The management was decided following clinical, imaging, and EUS guided biopsy findings. 18 patients underwent surgery (Whipples - 6, Central pancreatectomy - 2, Distal pancreatectomy -8, Enucleation - 1). There were 3 malignancies (all were in MCN).

Discussion and conclusion

The demographic and clinicopathological data in Sri Lanka with regards to patients with pancreatic cystic neoplasms are similar to the published international data. However, due to the rarity of the condition, multi center data collection and analysis is needed to establish the disease pattern in the Sri Lankan community.

PP74 - Predicting the actual need for postoperative intensive care in an adult population undergoing elective major general surgery - utilizing The American College of Surgeons - National Quality Improvement Project surgical risk calculator (ACS-NSQIP)

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Introduction

An accepted model for predicting the need for postoperative intensive care in patients undergoing elective surgery is lacking the world over. Hence, ICU bed allocation is based on the time of booking. A validated tool for predicting the actual need for postoperative intensive care would facilitate efficient utilization of limited resources while ensuring patient safety.

Methods

The ACS-NSQIP is a tool validated for the prediction of the percentage risk of serious postoperative complications (RSC%). Perioperative data of 126 patients who underwent elective major general surgery were obtained employing a specially designed proforma and the RSC% for each patient was correlated with the level of postoperative care needed. (Level 1: ward-based care, level 2: single organ support excluding mechanical ventilation, level 3: patients requiring two or more organ support or needing mechanical ventilation alone).

Results

The mean predicted RSC% for the 3 levels of care were 9.92%, 13.8%, and 15.18% respectively. A positive correlation ($r=0.470$) was found between the RSC% and the level of postoperative care required.

Discussion and conclusions

The ACS-NSQIP can be used as a tool to predict the actual need for ICU care following elective major general surgery. Using this tool, those who definitely warrant intensive care with organ support (RSC% >10.12) and those could be managed in a high dependency unit with level 2 care (RSC% 7.7 - 10.12) could be predicted with 95% confidence intervals. The statistical significance can be reinforced with multi-center data.

PP75 - Comparison of Histopathological diagnosis of appendicectomy specimens & Alvarado score on admission – A retrospective analysis in single general surgical unit in a tertiary care center

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Introduction

Acute appendicitis is a clinical diagnosis. Alvarado score has been described widely as an aid in diagnosis of appendicitis.

Methodology

Histopathology reports of patients underwent appendectomy were compared with Alvarado score on admission in a single surgical unit of NHSL retrospectively from October 2019 to June 2020. Alvarado score of less than 6 was taken as less likely of appendicitis. Chi-square test was performed to compare groups.

Results

51 patients were included. Mean age was 30.5 (range -16-57 years). Male: female ratio was 25: 26. Alvarado score was <6 in 34(66.7%) patients. In this group acute appendicitis was histopathological diagnosis in 24(70.6%) patients. Rest(10 – 29.4%) showed lymphoid hyperplasia. Alvarado score was >6 in 17(33.3%) patients. Out of this, 12 (70.6%) patients had acute appendicitis as histopathological diagnosis. Rest (5-29.4%) showed lymphoid hyperplasia. P value between two groups was 1. Types of histopathology found in these 51 patients are as follows; lymphoid hyperplasia - 15, acute appendicitis - 36

Conclusion

In our cohort no statically significant difference was observed between the Alvarado score and the histopathological diagnosis of acute appendicitis. Similar studies with large number of patients would be helpful to accuracy of Alvarado score in predicting appendicitis.

PP76 - Descriptive analysis of thyroidectomy specimens in single general surgical unit at a tertiary care hospital

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Introduction

Total thyroidectomy is performed for both benign and malignant conditions. It is a common major surgery performed in a general surgical unit.

Methodology

Histopathology reports of patients who underwent total thyroidectomy at single surgical unit of NHSL were analyzed retrospectively from January 2019 to December 2019.

Results

Ninety seven patients had underwent total thyroidectomy. 30(30.9%) patients had malignancies & 67(69.1%) patients had benign conditions. Mean age of malignancies was 46.8 (range – 25-68 years). Male : Female ratio was 1:14(2:28). 9(30%) had follicular carcinoma. 21(70%) had papillary carcinoma & its subtypes. 1(3.3%) had follicular carcinoma, papillary microcarcinoma & follicular adenoma in the same gland. 8(38.1%) had papillary microcarcinoma. 10(47.6%) had classic papillary carcinoma. 2(9.5%) had follicular variant of papillary carcinoma. Mean age of benign conditions were 47.7(range – 24-73 years). Male : Female ratio was 1:7.4(8:59). 2(3%) had follicular adenoma. 2(3%) had Hurthle cell nodule. 2(3%) had non-invasive follicular thyroid neoplasm with papillary like nuclear features. 2(3%) had granulomatous thyroiditis. 5(7.5%) had Hashimoto's thyroiditis. 11(16.4%) had autoimmune thyroiditis. 43(64.2%) had colloid goiters. Out of 97 specimens 4(4.1%) had 1 parathyroid gland in the specimen.

Conclusion

Our cohort has a female predominance. Benign conditions were more common and both groups had almost equal mean age. Out of malignancies papillary carcinoma & its subtypes are more common. Inadvertent excision of parathyroid gland(s) incidence is less in our cohort.

PP77 - Presence of fatty liver disease leads to unusual rise of liver enzymes in patients with common bile duct colic.

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Introduction

This study compares liver enzymes, inflammatory markers and bilirubin levels in patients with and without fatty liver disease presenting with common bile duct obstruction.

Methods

Common bile duct colic was diagnosed based on clinical, radiological and biochemical criterion. Presence of fatty liver disease was diagnosed by ultra sound scan and the macroscopic appearance of liver during surgery. Liver enzymes, inflammatory markers and bilirubin levels were prospectively assessed and compared between the two groups.

Results

Out of 42 individuals, there were 22 (52.3%) patients with fatty liver disease. Median body mass index was 26.9 (24.1 – 30.8) in the fatty liver group compared to 25.7 (23.5 – 26.2) in others. Individuals with fatty liver disease showed high aspartate amino transferase (558.5 vs. 247.0, p = 0.005), alanine amino transferase (467 vs. 228.5, p = 0.005) and bilirubin (3.8 vs. 2.2, p = 0.015) levels compared to those without fatty liver disease. According to multiple linear regression models, high aspartate amino transferase and alanine amino transferase levels showed significant associations with fatty liver disease after adjusting for age, gender, body mass index, amylase and C- reactive protein levels. The median enzyme level at two weeks did not show a difference.

Conclusions

Presence of fatty liver disease causes unusual rise of aspartate amino transferase and alanine amino transferase levels in patients with common bile duct stones. This rise is transient.

PP78 - The Incidentally found gallbladder cancer (iGBC) after laparoscopic cholecystectomy; single unit experience

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Introduction

Gall bladder cancer is the second most common cancer of the biliary tract cancers. It has a low incidence in United States (1.2 per 100,000) while India has a high incidence (21.5 per 100,000). The age adjusted incidence remains stable worldwide with the exception of Japan. Gall bladder cancer is usually diagnosed at an advanced stage and only one third is diagnosed preoperatively. In 47% to 78% of patients Gall bladder cancer is found incidentally after cholecystectomy.

Method

In a retrospective study, data from consecutive patients who underwent laparoscopic cholecystectomy (LC) for symptomatic gall stone disease from 1998 March to 2020 March in a single unit were analyzed. Indications other than gall stones were excluded from the study.

Results

During the study period 399 has undergone LC. Mean age was 43.45 (10 to 84) years and Male to female ratio was 1 to 1.5. There were 2 patients with iGBC (0.5 %). Both patients had multiple pigmented stones. They had grade 2 T1a tumors. Cystic duct margin was free of tumour in both patients. Minimum follow up was 3 months and maximum was 1 year. One patient developed port site recurrence after 3 months and she underwent port site excision 3 times. (n=1, 50%) and finally she died of multiple recurrences.

Conclusion

The incidence of iGBC is 0.50% in patients who undergo LC for symptomatic gall stones and it has not changed over last 22 years.

PP79 - Scrotal Lymphedema – Excisional Surgery and Reconstruction – Outcome Analysis

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Introduction

Lymphedema of the Scrotum is a condition with significant morbidity affecting activities of daily living. It can cause dependent ulcers leading to life-threatening infections. Lymphatic Filariasis is a commoner benign cause.

Methodology

Six patients with isolated unilateral lymphedema who underwent excision and primary reconstruction were followed up prospectively to identify early complications including dehiscence and infections and late complications like recurrence. Patients were followed up at the clinic and evaluated by the operating surgeon. Operative Surgery – Pre operative USS scans were performed to identify hydroceles and any testicular pathology which may co-exist. Under anesthesia, scrotum was thoroughly examined to identify the demarcation between normal and lymphedema skin and marked with a permanent ink. Then all affected tissues were removed en-block deep to the Tunica Vaginalis which was opened and any hydroceles were drained and excised. Normal skin is rearranged as random flaps to reconstruct a neo-scrotum following near total excision of tissues with edema and dilated cystic lymphatics.

Results

Mean age of patients was 41 years and all had large isolated uni-scrotal lymphedema of which 4 in right side. All had symptoms due to the size and recurrent fungal infections but no evidence of ulcerations.

Four patients had excellent recovery except for minor lymph leaks from suture line. Two patients had dehiscence of 25% of incision length with lymph leaks. All were managed with secondary healing. No recurrences were seen in short period of follow-up of 6 months.

Discussions

Scrotal Lymphedema excision and primary reconstruction gives promising results.

PP80 - Comparison of overall survival pattern in colorectal cancer patients over time; North Colombo experience

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Introduction

Colorectal cancer (CRC) is the third commonest cause of cancer related deaths globally and the 4th commonest cancer in Sri Lanka. Recent past has seen an increase in incidence of CRC and an improvement in survival. There is a paucity of CRC survival data from the South Asian region. This study analyses survival patterns of a cohort of CRC patient from the North Colombo region.

Methodology

Patients treated for CRC with a curative intent between 1997 and 2020 were prospectively followed up. Patients treated pre and post 2010 were compared in terms of demographic data, tumour characteristics and long-term survival. Kaplan-Meier survival curves with log rank, Breslow tests were used to compare overall survival (OS).

Results

A total of 704 patients have undergone surgery for CRC during the period (Female - 51%, median age – 60; range 17-89). In the pre 2010 75% presented as advanced disease (>T3) compared to 69.7% post-2010. Mean OS showed a statistically significant difference in the two time periods (Pre 2010: mean – 126 months; SE=6.403 vs Post 2010: mean =111.1 months, SE=4.603; P<0.001). The 5 and 10 year OS in the post 2010 era was significantly better (5y OS: Pre 2010- 58% vs Post 2010- 69%; P=0.003, 10y OS: Pre 2010 - 45% vs Post 2010 - 66%; P<0.001).

Conclusion

There is a statistically significant improvement in OS over time. Improved survival in the POST 2010 cohort may be attributed to increased availability of screening, improvements in surgical technique, equipment and improvements in adjuvant treatment.

PP81 - Paediatric Thoracoscopic Surgery: Where we are now and what we learned

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Introduction

Paediatric thoracoscopic surgery has undergone a major breakthrough over last 2 decades. Here we elaborate our first reported srilankan experience of paediatric thoracoscopic surgery in neonates and children over the last 18 months duration in a single centre.

Methods

We performed retrospective review of all the neonates and children who underwent thoracoscopic surgery from April 2019 until July 2020. For neonatal conditions the selection was based on the physiological stability and the severity of the pathology. For older children technical feasibility was considered in selection for the procedure.

Results

During the study period we found 19 patients who underwent thoracoscopic interventions. There were 8 neonates who had diaphragmatic hernia while 4 had repair of congenital eventration. Three children underwent thoracoscopic decortication for empyema. One child each had thoracoscopic interventions for Congenital Pulmonary Airway malformation, pleuropulmonary blastema, thoracic neuroblastoma and fungal lung abscess.

All the neonates had successful completion of thoracoscopic procedure without conversion. Except the child with pleuropulmonary blastema, all others had thoracoscopic procedure completed. There were no recurrences after diaphragmatic hernia repair while two neonates out of 4 with eventration had late onset recurrence. One neonate with diaphragmatic hernia died due to sepsis.

Discussion and Conclusion

Advanced thoracoscopic surgery in neonates and children is safe and feasible. Thoracoscopic interventions for empyema and diaphragmatic hernia have excellent outcomes with appropriate case selection and standardized technique. Efficacy of thoracoscopic repair of congenital eventration has to be critically reviewed in view of technical difficulty and high risk of recurrence.

PP82 - Demographics and disease characteristics of pancreatic adenocarcinoma in Sri Lanka: experience of a tertiary referral center

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Introduction

Pancreatic adenocarcinoma (PAC) remains one of the most aggressive malignancies worldwide with a low resectability rate and poor overall survival. Data on characteristics of PAC are sparse in Sri Lanka.

Method

A retrospective analysis was carried out in 91 patients diagnosed with PAC presented to a tertiary referral center from various parts of the country over a 5 year period since 2015. The diagnosis was based on decisions taken at a multi-disciplinary meeting and/or histology.

Results

Male: Female ratio was 9:5. The mean age at diagnosis in males was 61.2 years and in females 58.8 years. The majority (71.09%) of the tumors were in the pancreatic head, while body and tail tumors accounted for 18.83% and 10.08% respectively. Metastases were present in 58.3% of cases at the time of diagnosis. Although 19.2% of tumors were surgically resectable only 12.3% of patients were operable. CA 19-9 levels were elevated in 74.2% of PAC and correlated positively with advanced malignancy.

Discussion and Conclusion

The clinical characteristics of PAC and the rate of resectability in Sri Lanka are similar to studies of the western world. However, the rate of operability in our cohort was lower than most published data from the west.

PP83 - Clinical presentation, evaluation and surgical outcome in a group of patients with Thoracic outlet syndrome.

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Introduction

Thoracic outlet syndrome (TOS) consists of a group of pathologies arising as a result of compression of structures at the thoracic outlet. Although the management is usually conservative, persistent symptoms may warrant surgery. There are only a few studies analyzing TOS in Sri Lanka as well as international literature.

Methods

A retrospective study was done in Vascular department Teaching Hospital Karapitiya using patients who underwent surgery for TOS from October 2018 to February 2020. Data was collected using clinic notes, questionnaire and interviewing patients. All the surgeries were done through supraclavicular approach by a single surgeon.

Results

Total number of 7 patients were analyzed. All were young females. Mean age was 30 years. Majority had neurological TOS (N=5; 71.4%). Arterial TOS 1 (14.2%). Venous TOS 1 (14.2%). Majority presented with pain and numbness (N=6; 85.7%). 1 presented with DVT. Mean pre operative pain score was 4. Two had sensory impairment. Roos test was positive in one patient and negative in others. Adson's, reverse Adson's, Wright's and Eden's tests were negative in all the patients. Intra operatively all were found to have incomplete

cervical ribs. Four patients had hypertrophied scalenus anterior which required division of the muscle. Post operatively all were pain free. Only one patient had temporary brachial plexus neuropraxia, which was completely resolved after 3 months.

Conclusion

Young females with persistent pain and numbness of upper limbs should be investigated for TOS. Neurological TOS is the commonest variety and commonest cause is cervical rib. Supraclavicular surgical approach gives easy surgical access with minimum complications.

PP84 - Expressions of Estrogen(ER), Progesterone receptors(PR), HER2/neu & Ki67 status & evaluation of Nottingham Grading status in a cohort of Breast cancer patients presented to a single unit during two years duration.

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Introduction

Triple-negative breast cancers are characterized by the absence of estrogen receptor(ER), progesterone receptor(PR) and HER2/neu which accounts for 15% of all types of breast cancer. In breast cancer, Ki67 is an independent prognostic marker, a predictive marker of response to chemo-endocrine therapy. Average Ki67 value in some literature is 56%. Nottingham Grading System (NGS), is recommended to determine the histological grade which is a prognostic determinant.

Methodology

The Hormonal receptor prevalence, Ki67 status & histological grade were analyzed by using histology reports of patients who underwent surgeries for diagnosed breast carcinoma.

Results

Sample size was 62 in total. 69.35% of breast carcinoma was ER positive while 75.8% was PR positive. 37.09% were HER/2neu Positive. A fraction of 54.83% had Nottingham Grade 2 breast carcinoma, while 37.09% were Nottingham grade 3 in histology. Average Ki67 rate is 43.11 where The Ki67 group 31 – 45 was highest in prevalence which is 29.03%. A 9.68% of the sample was triple negative breast carcinomas which had 64.33% of average Ki 67. ER PR positive but HER/2neu negative breast carcinoma was 39.21% of the sample. In 17.64% patients only HER2/neu was positive. A fraction of 25.49% patients were positive for all ER PR & HER/2neu.

Conclusion

Triple negative breast cancer percentage & Average Ki67 values are lesser than available literature. A large multicenter sample analysis is indicated to verify the results and also to understand them in the background of possible limitations in availability and proper practice of immunohistochemistry facilities.

PP85 - Syndactyly separation - comparison of early phase outcome in open versus closed technique – A unit Experience

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Introduction

The fusion of the adjacent digits (syndactyly) causes significant developmental, functional, and cosmetic impact to the paediatric patient. Open technique (OT) involves the separation of digits with small random multiple cutaneous flaps for cover, leaving raw areas (<5mm) left to heal with epithelialization. In contrast, the closed technique (CT) utilizes interdigitating triangular flaps with skin grafts covering deficits. This study follows the outcome of the techniques in Sri Lankan population.

Method

A Prospective descriptive study was conducted over 10 months from October 1st 2019 at the Plastic and Reconstructive surgery unit at Lady Ridgeway Hospital for Children. Ten patients with congenital simple, incomplete syndactyly (age range 1-8 years) were selected randomly. Four patients underwent CT and six patients had OT procedures. All were operated by the same team of surgeons and followed up at postoperative day 10, 14 and 21 with surgical site inspection and a questionnaire given to the parents.

Results

Average operative time difference between closed and open is 32.5 minutes (255 min vs 222.5 min). Wound infection, dehiscence of the flaps was not observed in either group. Average number of post-operative dressings in OT is 3.33 and CT 3.75. All the OT flaps had skin maceration which was absent in CT. Patient satisfaction at postoperative day 21 was similar in both groups.

Discussion and Conclusion

The reduced operative time in open technique is beneficial in high turnover units. Maceration resolves with no subsequent adverse outcome. Open technique is a feasible method with similar outcomes to closed technique and utilizes less operative time.

PP86 - Surgical Anatomy of the Superficial Circumflex Iliac vessels in Sri Lankan Population

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Introduction

Superficial circumflex iliac artery (SCIA), a branch of the femoral artery (FA) divides into superficial (SB) and deep (DB) branches. SCIA based fascio-cutaneous and composite flaps help in free and pedicled tissue transfers with minimum donor site morbidity. The objective of the study is to study the SCI vascular-anatomy and variations in the Sri Lankan population to improve the reliability of SCIA based flaps.

Method

In seven adult cadavers, bilateral groins were dissected under magnification with microsurgical dissection. The coordinates of important landmarks were measured as X and Y axes - parallel and perpendicular to the inguinal ligament.

Results

The average length of the IL is 113.8mm (120-98). SCIA, SB, and DB were found in all specimens. The average point of origin of SCIA is 39.5mm(x), 17.3mm(y). 83.3% SCIA is originated as an anterior branch of the FA. The average diameter of SCIA main trunk was 1.5mm and length was 5mm (1-10). Average SCIA branching point is 46.2mm(x), 18.2mm(y). The superficial branch was larger in the majority (66.6%) with an average diameter of 1.22mm whereas the average diameter of DB was 1.08mm. DB has three consistent branches; muscular branch, transverse branch, and bone branch. Separately draining subcutaneous vein was found in 50%. The lateral femoral cutaneous nerve was deep to DB in 50%.

Conclusion

Anatomy of SCIA and its branches are consistent in Sri Lankan population, hence raising flaps based on its branches and perforators could be performed reliably and safely.

PP87 - Rare surgical challenge in Paediatrics: Aplasia Cutis Congenita: A Unit experience

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Introduction

Aplasia Cutis Congenita (ACC) is a rare, heterogeneous group of congenital disorders characterized by focal or widespread absence of the skin and underlying tissue layers including dura and bone. Providing soft tissue cover might be a challenging task specially noncutaneous tissue loss is present exposing vital structures like dura and the brain.

Method

A descriptive prospective study from October 1st, 2019 to July 31st, 2020 following up the patients presenting with ACC to the Plastic and Reconstructive surgery unit, Lady Ridgeway Hospital for Children. The site, size, shape, type, signs of intrauterine healing, and the clinical response over time were observed.

Results

Six cases were followed up over the study period. Three cases were ACC of the scalp and three were ACC of the trunk and limbs. All Scalp ACCs were membranous type with oval shape defects and maximum diameters were 1.6cm, 1.2cm, and 0.9cm. All were clinically nonsyndromic and no other congenital defects were observed. Both trunk and limb ACCs were asymmetrical bilaterally and irregular in shape, with evidence of intrauterine healing. One had a history of intrauterine death of a twin pregnancy. All showed a good response to collagen and hydrogel dressings with only 2 patients needing operative procedures for wound control. None required skin grafting.

Discussion

Most ACCs can be managed non-operatively in the acute phase. Membranous scalp and limb and trunk subtypes were the only observed varieties. (Some extensive lesions may require scar revision at a later stage.)

PP88 - Artery 1st or vein 1st? A hard decision in upper limb reimplantations

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Introduction

Reimplantations are challenging encounters in trauma care to microvascular surgeons. Success depends on multiple factors that of both surgeons and patients. Order of vascular repair (artery 1st or vein 1st) is decided according to the case, time of presentation, and surgeon's preference and expertise.

Methods

A descriptive prospective study commenced from the 1st of April for one year at the National Hospital plastic and reconstructive unit studying eight(8) traumatic reimplants of the upper limb. Cases were randomly selected for both procedures which were done by the same surgeons and the same postoperative protocol was followed.

Results

Two forearms (FA), two thumbs (T), one fingertip (FT), one distal phalangeal (DP), and two metacarpal (MC) level replantation were done. One MC and FT failed due to venous congestion and arterial insufficiency respectively. The failure rate was 25%. In both cases, the artery was done 1st. One out of two FA, the artery was done 1st and significant intraoperative blood loss noted from the veins of the amputate. One out of two T, the vein was done 1st. In other cases, the Artery was done 1st. Subjective easiness in venous anastomoses noted when the artery was done 1st.

Discussion

No correlation was found between success and the vascular repair sequence. Success is multifactorial. In proximal replants, veins 1st technique minimizes the blood loss. Technical easiness of venous anastomoses also noted when the artery was done 1st.

PP89 - Are we treating our scars adequately? Scar therapy awareness among general surgical senior house officers

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Introduction

The outcome of a surgical scar is of major concern to patients. The final appearance of a scar will depend on many factors. Scar therapy is a proven modality to improve the outcome of scars. In Sri Lanka, it's delivered through all the teaching and most of the district general hospitals through occupational therapy units (OTU) and plastic surgical units.

Method

A questionnaire based assessment of 21 surgical senior house officers (SHO) was done at three major hospitals in Western province. Knowledge on awareness, different therapy types, advice, medications, and referring to relevant units were assessed.

Results

Seven (30%) have heard of scar therapy. But none of them advised their patients. Nobody was aware of the types of therapy modalities. Two (9.5%) think that scar therapy should commence from postoperative day one. No one was aware of what advice needs to be given. Only 4 (19.04%) were aware that scar therapy is delivered at their hospital, but none of them had referred patients previously. Only two (9.52%) knew the exact units that the therapy is available. Three (14.28%) prescribed silicon-based topical applications for the facial scars but did not follow up with their patients.

Discussion and Conclusion

Doctors who deal with scars should be well aware of scar therapy, different therapy modalities, and how to advise their patients or refer to a unit that they can provide an optimum service. Improving scar quality increases patient satisfaction and reduces the burden of scar revision.

PP90 - Pattern of hormone receptor and human epidermal growth factor receptor 2 expression in Sri Lankan females with breast cancer: A single unit experience

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Introduction

Expression of hormone and epidermal growth factor receptors correlate with the biological behavior of Breast Cancer and guide the management. This study aims at describing the patterns of receptor expression in Sri Lankan females with breast cancer in a single unit at National Hospital of Sri Lanka.

Methodology

A Descriptive study was performed in 50 consecutive histopathological reports following surgery for breast carcinoma in ward 30 A of National Hospital of Sri Lanka from January 2019 to date. Descriptive statistics were applied for categorical data using SPSS version 26.

Results

Out of 50 Specimens 39 (78%) were hormone receptor positive. ER was positive in 74% and PR was positive in 72%. Thirty four (68%) specimens expressed both ER and PR. HER2 was positive in 17 (34%) specimens. Luminal A type was seen in 18 (36%) specimens and Luminal B type in 14(28%). Five specimens had triple negative and 3 had HER2 enriched types. However 10 (20%) specimens showed equivocal pattern of HER2 on immunohistochemistry. Proliferative index was <10% in 2 (4%) and >20% 44 (88%). Eight (16%) specimens had a proliferative index >70.

Conclusion

According to this study majority of breast cancers in Sri Lankan females express hormone receptors and approximately one third express Her 2. These results are in keeping with literature from the region. Further studies on larger samples are recommended to assess correlations.

PP91 - Histopathological Characteristics of Ductal Carcinoma Insitu (DCIS) in Sri Lankan females with Breast carcinoma: A Single center descriptive study

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Introduction

Breast cancer is the commonest cancer affecting females in Sri Lanka. DCIS is a premalignant lesion for breast cancer and may coexist with invasive breast cancer. This study describes the histopathological characteristics of DCIS among females in Sri Lanka.

Methodology

This is a descriptive analysis of 55 histopathological specimens of 53 consecutive patients who are diagnosed with breast carcinoma in a single unit at National Hospital of Sri Lanka from January 2019 to date. Descriptive statistics were applied for categorical data using SPSS version 26.

Results

A total number of 55 reports of separate specimens were analyzed. All were females (n=53) and 2 underwent bilateral mastectomies. Out of 55 specimens 25 (45.5%) had DCIS. Out of them 6 (24%) had high grade DCIS which also had associated invasive component. Eight (32%) had extensive (>25%) DCIS component and 4 (16%) had DCIS less than 5%. There were 5 (20%) specimens having DCIS without an invasive component. The commonest histological pattern of DCIS was solid (52%). In addition comedo (36%), papillary (8%) and micropapillary (4%) patterns were reported. Multifocal DCIS was reported in 18 (72%).

Conclusion

This study highlights important histopathological characteristics of DCIS including grade, pattern and multifocality. Nearly half of breast cancers are associated with DCIS and about one third of them have extensive DCIS. Majority of our patients had multifocal DCIS.

PP92 - Paediatric burns analysis: a unit experience

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Introduction

Burns in the Paediatric population is a massive burden to the health care system as well as to the affected families. Identification of burn patterns helps to take necessary actions in prevention. This study analyzes the burns in Paediatric burn center in Sri Lanka.

Method

A retrospective descriptive study was done at the Paediatric burn center of Lady Ridgeway hospital analyzing 1st seven-month admissions to the unit.

Results

The total number of admission was 399. The average age was 4.46 years (1 month-13 years). 47.5% were below 3 years and 52.5% above 3 years. 60.5% were males and 39.5% were female patients. According to the nationality 76.9% Sinhalese, 14.1% Muslims and 9% were Tamils. No specific burn patterns were identified according to nationality. 63.3% of the admissions are from Colombo district whereas 23.6% from Gampaha, 5.8% from Kalutha, 1.3% each from Rathnapura, Puttalam, and Kurunegala, less than 1% from other districts. In 398 cases the burns were accidental while one was suicidal. Burns to hot fluids account 70.3%, chemicals 0.6%, contact burns 8.1%, flame 4%, hot gases 0.5% and firecracker 1%. The first two months of the year recorded 61.9% of the total.

Discussion

Most of the burns were due to domestic accidents. Public awareness should be increased to prevent burns among the paediatric population. This should be identified as a national health problem that can be prevented.

PP93 - Low Anterior Resection Syndrome in a selected group of patients who underwent laparoscopic low anterior resection

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Introduction

Laparoscopic low anterior resection(LAR) is increasingly performed in the patients with rectal cancer in Sri Lanka. Although LAR has been proven with equivalent oncological outcomes and faster recovery compared with open AR, Low Anterior Resection Syndrome (LARS) is one of the main growing concerns associated with LAR since its association with decreased quality of life. Data regarding LARS is sparse in Sri Lanka.

Methods

Sixty-five consecutive patients undergoing laparoscopic LAR were selected. Patients with ileostomies (16) were excluded. An interview-based questionnaire was applied and Low Anterior Resection Syndrome (LARS) scores were generated. Eight patients did not respond. Severity categories were as, no LARS (0-20), minor (21-29) and major LARS (30-42) groups.

Results

Of a total 41 patients, 17 were female and average age was 66 years. No LARS was seen in 24 (60%), 7(17.50%) had minor LARS and 9 (22.50%) had major LARS. The commonest symptom was increased stool frequency and least prevalent was fecal incontinence. Sixty-eight-percent of LARS patients has undergone neoadjuvant chemo-radiation. Forty-six-percent of the study population (19) had been followed up for less than 48 months, 41% (17) for 48 to 60 months and 12% (5) for >60 months. Preoperatively, all were free of these symptoms.

Conclusion

LARS was seen in 40% of patients undergoing laparoscopic LAR with a majority having undergone neoadjuvant chemoradiotherapy.

PP94 - Impact of Covid-19 on emergency surgical services in a tertiary hospital

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Introduction

The Covid-19 pandemic has affected 'non-Covid' patient care due to the disruption of health services globally. In Sri Lanka, safety measures were taken at institutional and national level to curtail elective health facilities though emergency services continued. The objective of this study was to assess the impact of Covid 19 on emergency general surgical (eGS) trauma and non-trauma procedures in the main tertiary hospital of the country.

Methods

This was a descriptive, retrospective study. All patients who underwent eGS (trauma & non-trauma) from 1st January to 30th June 2020 were included. Data were collected from registers of the accident service and casualty surgical theatres.

Results

During the 6 months, 7034 eGS procedures were performed with a male: female ratio of 1.85:1 and a mean age of 53.4 (16-88) years. Table 1 and 2 illustrate the total number of trauma and non-trauma emergency eGS procedures during this period. Compared to the first 3 months of 2020, the mean percentage fall in trauma and non-trauma eGS for the worst affected month of April was 52.64% and 41.32% respectively. Comparing February to April, the overall reduction in minor-intermediate and major-complex major eGS categories was 35.7% and 37.3% respectively.

Discussion and conclusion

eGS trauma procedures dropped by more than half in the worst affected month of April but rapidly returned to previous levels with the easing of the lockdown in May. The fall in non-trauma eGS was less pronounced and but showed a slower return to normality. The reduction was uniform across all categories of eGS.

PP95 - Redefining Buerger's angle and Pole test for chronic limb threatening ischaemia patients with diabetes

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Introduction

Quantification of chronic limb threatening ischaemia (CLTI) is widely done using ankle brachial pressure index (ABPI), toe pressure (TP) or transcutaneous oximetry (TcPO₂). In diabetes, ankle level pressures are unreliable due to medial calcification of vessels. Ulcers and gangrene limit using TP and TcPO₂. We explored the Buerger's angle and the pole test; combined with continuous wave Doppler to identify CLTI.

Methods

Consecutive 40 limbs in 28 diabetes patients assessed. ABPI was assessed following standard protocol. With the Doppler probe placed over ankle level anterior tibial and posterior tibial arteries sequentially, legs were slowly elevated until the signal was lost. The leg elevation angle (with femur greater trochanter as the pivot point) and the heights were documented and the highest values analysed.

Results

Majority were males [67.8%(19)]. Mean age was 64.14(39-83). Five (17.9%) had chronic kidney disease. Thirteen limbs (32.5%) were asymptomatic; 8(20%) had rest pain and 24(60%) had tissue loss. ABPI (0.38 – more than 1) was categorized as <0.4, 0.4-0.59, 0.6-0.79, 0.8 and more. The angle (12- 90 degrees) was categorized as < 30, 30-60 and 60-90. Height ranged 21-90cm. Linear regression reveal significant correlations between ABPI, and Buerger's angle($r=0.467$, $p=0.002$) and the height ($r=0.440$, $p=0.004$). Angle categories are also significantly associated($p=0.034$).

Discussion and conclusion

Leg elevation angle and pole test height correlate with ABPI in this sample. These tests may be more accurate, and easier to perform than ABPI. However larger samples and follow up are necessary for its validation and implementation.

PP96 - Pattern of Axillary lymph node metastasis in breast cancer: Results from a retrospective analysis in a surgical unit at National Hospital of Sri Lanka

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Introduction

Sentinel lymph node biopsy (SLNB) is the current standard of managing a clinically and radiologically negative axilla in breast cancer. Although axillary clearance is a standard management option when SLNB is positive there are occasions where Non sentinel metastasis is absent.

Methods

This is a retrospective analysis of 38 Consecutive patients who were diagnosed to have breast carcinoma and underwent SLNB for staging of axilla in a surgical unit at National Hospital of Sri Lanka from January 2019 to July 2020. Descriptive statistics were applied for categorical data using SPSS version 26.

Results

Results of 38 consecutive SLNBs were analyzed. All cases were females. Mean age was 51.1years (SD-10.8). Single tracer technique was used with 3-5ml of methylene blue injected to sub areolar region routinely and peritumorally when the tumour is in UOQ. According to the harvested number of SLN, 18(47.4%) had 1 SLN and 13 (34.2%) had 2 SLN. Remaining 7(18.4%) who had either 3 or 4 SLN were reported as negative. Out of all SLNB 9(23.7%) were reported as positive and subsequently underwent Level II axillary clearance. All axillary lymph nodes dissection (ALND) had adequate (>10) LN harvest and mean total LN harvest was 16.1 (SD-3.66). Non sentinel LNs were negative in 44.4% of these ALNDs. Mean LN ratio was 0.27 (SD-0.22).

Discussion

This study highlights that SLNB has avoided unnecessary ALND in three fourth of patients. However it is apparent that significant proportion of ALNDs following positive SLNB reported as Non sentinel LN negative. Further studies are recommended for analysis of correlations.

PP97 - Improvement of Venous Clinical Severity Score after Ultra Sound Guided Foam Sclerotherapy for Symptomatic Varicose Veins : A Sri Lankan Cohort

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Introduction

Non surgical minimally invasive treatment options for varicose veins are becoming increasingly popular among practitioners and patients. Ultra sound guided foam sclerotherapy (UGFS) is a minimally invasive treatment option for varicose veins. Aim of this study is to determine the improvement of symptoms following UGFS for varicose veins.

Methodology

Patients who underwent UGFS for symptomatic varicose veins between 2018 to 2020 in North Colombo Teaching Hospital were followed up and analyzed prospectively. Venous clinical severity score (VCSS) is used as a tool to determine the patient symptoms before and after UGFS. Comparison of VCSS pre and post UGFS was done with Wilcoxon signed-rank test. A P value of <0.05 was taken as significant.

Results

A total of 81 patients completed the survey. All cases were done as day case procedures in a specialized vascular clinic. 60.5% were female and the median age is 55 (Range - 23-81). 95% of UGFS was done for unilateral lower limb disease. Median follow up duration is 14 months and median procedure time is 10 minutes. All cases were done under local anesthesia as day case procedures. 14% of patients complained of non resolving varicose veins after UGFS. Wilcoxon signed-rank test analysis reveals a statistically significant decrease in VCSS following UGFS (p<0.001, Standard Error-188.8).

Conclusion

Ultrasound guided foam injection is a feasible and effective treatment modality for the treatment of varicose veins. Relatively low procedural time, clinic based treatment and its efficacy makes it an attractive treatment modality.

PP98 - A close loop audit assessing the adherence to Ministry of Health, Sri Lanka surgical check list in routine surgical procedures in general surgical unit.

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Introduction

Patient safety is medical teams' one of the utmost responsibilities. Knowing this importance, in December 2013 Ministry of Health, Sri Lanka made Surgical Safety checklist mandatory for all minor and major surgeries.

Objectives

To assess and improve the adherence to Ministry of Health, Sri Lanka surgical check list.

Methods

We performed a complete audit cycle on improving adherence to the Ministry of Health, Sri Lanka surgical check list. In the base line audit, surgical check lists were traced retrospectively and completeness for all the components were checked for a period of one month in order to calculate adherence. Each component was given one marks and average scores were calculated for sub-categories. Strict protocol for attachment of checklist was introduced and education sessions were held regarding this subject to stakeholders. After five months of implementation of these measures a re-audit was done in similar fashion.

Standards

100% adherence was set as the standard for Usage of checklist in all the surgeries as mentioned in Ministry of Health Sri Lanka, General Circular No: 02-185/2013 and other components were taken from Implementation manual, WHO Surgical Safety Check List and the standard for adherence was again set as 100 %.

Results

Usage of check list rocketed from 36% to 96% after interventions while improving adherence of all the components of checklist. Average total score almost quadrupled and average scores of all the subcategories improved drastically.

Conclusion

Adherence to Ministry of Health, Sri Lanka surgical check list can be uplifted by doing simple interventions.

PP99 - Getting a free margin in Wide Local Excision of a palpable breast carcinoma: Retrospective analysis in a tertiary care breast unit

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Introduction

Surgical management of breast cancer has become less radical with improved cosmetic outcome over last few decades. However there are occasions of perceived free surgical margin in WLE of a palpable tumour becoming pathologically positive.

Methodology

This is a descriptive analysis of 33 consecutive histopathological specimens of WLE for breast carcinoma in a specialized surgical unit in National Hospital of Sri Lanka. Data were collected retrospectively from January 2019 to July 2020. SPSS version 26 was used in analysis.

Results

Thirty three reports of WLE specimens were analyzed. All were females and mean age was 49.4 years (SD- 10.8). Out of 33 specimens 8(24%) had positive margins with 5(15%) being focally positive. One patient had all margins positive except lateral margin. Out of margin positive specimens 3 (37.5%) had positive deep margins, 6 (75%) had positive peripheral margins and 3 had positive anterior margins. Mean of deep, peripheral and anterior margins were 16.4mm, 11.1mm, 8.8mm respectively. Selective cavity shavings were taken in 18 (54%) cases when surgical margins were in doubt. Out of them 13(72%) had achieved negative pathological margins. However 7 (53.8%) out of them had benign breast tissue only implying that cavity shaving was not useful in achieving a negative margin in this group.

Conclusion

The results of this retrospective study highlights that likelihood of peripheral margin being positive is apparently higher than deep or superficial margins. In addition selective cavity shaving has been useful in achieving a negative margin in a proportion of patients.

SP01 – Choice of Operative Approach in the treatment of Chronic Subdural Hematoma – An Insight.

Dr Saurabh sharma, Dr Anil k Peethambaran

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India

Introduction

The management of chronic subdural hematoma in the adult patient is approached with a variety of different surgical techniques. Recent trend has been toward treatment with burr holes [single or double] or twist-drill holes as compared to craniotomy.

Methods

In this retrospective study we compared post op results of 150 patients diagnosed with chronic SDH and underwent chronic SDH surgery.

Results

In a review of 150 patients presenting over 1-year period with chronic subdural hematomas, 20 underwent twist drill craniotomy, 115 underwent burr-hole craniectomy [single burr hole-109, Double burr hole - 6] and 15 underwent craniotomy and evacuation of hematoma. The recurrence of hematomas, requiring another operation, occurred in 3.0%; operative mortality was 2.50% at hospital discharge and 1% at follow-up. There was no significant difference in the incidence of postoperative complications, hematoma recurrence, or operative mortality among the different surgical groups. Conclusion-Burr-hole evacuation is the treatment of choice for an uncomplicated CSDH. There is no major significant difference in recurrence rate in single, double burr hole surgery or twist drill surgery. Most of the recent trials favor the use of drain for good evacuation and to reduce recurrence. Dural biopsy should be taken, especially in recurrence and thick outer membrane. Nonsurgical management is reserved for high operative risk patients or asymptomatic with minimal midline shift.

SP02 - Evaluation of extrahepatic biliary ductal anomaly in patients of choledochal cyst v/s general population

Eti Sthapak, Vijai Datta Upadhyaya

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India

Background

Normal biliary anatomy is seen in around 60% of the population. Magnetic resonance cholangiopancreatography (MRCP) is an excellent non-invasive imaging technique for visualization of detailed biliary anatomy. We compared the biliary anatomy in patients with choledochal cyst with that of general population.

Material and Methods

All cases of choledochal malformation operated in last 2 year were included in the study and compared to the 20 cadaveric dissections done during last 4 year. Proper dissection of the extrahepatic biliary duct was done. The extra hepatic course of the hepatic artery proper and its variants was delineated.

Result

A total of 19 cases of choledochal cyst managed during this period. Triple confluence seen in two cases and right hepatic duct opening in Aberrant hepatic artery was seen in 39% (11) cases. Accessory right hepatic artery was observed in 21.4% cases; and replaced right hepatic artery 10.7% cases. In 28.5% cases the right hepatic artery was crossing the common hepatic duct anteriorly. In cadaveric dissection variation in extrahepatic segment of hepatic artery was observed only in 36% cases.

Conclusion

Our pilot study showed that the variation in extrahepatic segment of hepatic artery was relatively more common in choledochal cyst malformation in comparison to normal population, though detailed study is needed for conclusion. The knowledge is important while operating these patients as the liver is compromised and slight damage to vascular supply may cause great insult.

SP03 - Management of Complicated choledochal cyst: a single centre experience?

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Introduction

The choledochal cysts, which refer to the cystic dilatation of the biliary duct, are rare lesions generally seen in children. The aim of the study was to observe the effect of biliary drainage in cases of complicated choledochal cyst before definitive surgery.

Material and Method

All the patients of choledochal cyst presented with features of severe cholangitis (not responding to intravenous antibiotics for 72 hours), evidence of pancreatitis or perforation were included 2013 to December 2018 were included in the study. After routine hematological and biochemical investigation all are subjected to ultrasound followed by MRCP. Depending on the age, MRCP finding and availability of logistic patients were managed with per cutaneous trashepatic biliary drainage (PTBD), cholecystostomy (external drainage) orpappilotomy with stent placement (internal drainage). In all cases the drained bile was sent for culture and fluid amylase and definitive surgery was done after 6 weeks (excision of the cyst with Roux en YHJ).

Result

A total of 64 children of choledochal cyst were treated during this period of which 18 patients were included in the study. 5 cases of perforated choledochal cyst, 7 cases associated with acute pancreatitis and one case with pseudocyst formation and in 5 cases ERCP and stenting was done because they were not responding to intravenous antibiotics. Age ranged from 3months to 15 years. Three patients underwent internal drainage (age>4 years) whereas 4 patient underwent PTBD (age, 1- 4 year) and in one patient open cholecystostomy(<1 year). The duration of time between drainage procedure and definitive surgery was ranged between 5 – 8 weeks. Drain fluid culture was sterile in 3 cases, and drain fluid amylase was less than 100 IU in 5 cases.

Conclusion

Our preliminary study suggest that biliary drainage help in controlling the infection and decrease the morbidity during definitive surgery.

SP04 - Evaluation of Nebulized N-Acetyl Cysteine in Outcome of Esophageal Atresia with Tracheo-Esophageal Fistula

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Introduction

Delayed presentation of patients of esophageal atresia with tracheo-esophageal fistula (EA+TEF) may lead to thick secretions, which leads to delayed stabilization of patients for surgery. We attempted to evaluate the role of nebulized N-acetyl cysteine (NAC) in liquefying the airway secretions and improving the outcome of patients of EA+TEF.

Methods

In this prospective non-randomized control study, 2ml of 10% NAC was given in a nebulized form (2:5 dilution, every 6 hours), both pre and post-operatively, along with regular suction of upper esophageal pouch. The group was compared with matched control, which comprised patients of EA+TEF not receiving NAC nebulization. The consistency of the secretions was compared by hand held consistometer in a unit of time (seconds) required to cross a predetermined distance along with gravity.

Results

Thirty patients, each of the cases and controls, were evaluated for consistency of saliva. Cases showed a significant ($p<0.05$) decrease in the consistency of secretions from controls after day 2 of NAC nebulization. Discharge was significantly ($p=0.01$) earlier in cases as compared to controls. There was no significant ($p>0.05$) difference in mortality between cases and controls.

Conclusion

It appears that NAC affects liquefying the secretions in EA+TEF patients. The discharge time is earlier when it is used. Further studies with more patients may show additional beneficial effects on its use.

SP05 - Does Resection of Metastatic Carcinoma Gall Bladder Which Becomes Resectable after Palliative Chemotherapy Gives Any Survival Advantage?

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India

Introduction

Metastatic gall bladder cancer (MGBC) has a poor prognosis with a median survival of < 6 months. Only curative treatment for GBC is complete surgical resection with lymphadenectomy (radical cholecystectomy). In metastatic cases, current standard is palliative chemotherapy with Cisplatin and Gemcitabine. There is a paucity of data regarding management of patients who become resectable after palliative chemotherapy.

Methods

650 patients of carcinoma gall bladder were evaluated retrospectively from a prospectively maintained database from January 2011 to March 2019 at three academic institutions. During this period, 231 radical cholecystectomies were performed. Patient with metastases were given option of palliative chemotherapy. 176 patients underwent palliative chemotherapy. Four patients of MGBC after 6 cycles of palliative Gemcitabine + cisplatin turned resectable radiologically and underwent radical cholecystectomy.

Results

Surgery was performed 4-6 weeks after last dose of chemotherapy. Male:Female was 1:3. The median age at presentation was 40.5 yrs (range 38-47 yrs). 3 patients underwent radical cholecystectomy while one underwent radical cholecystectomy with bile duct excision and Roux en y hepaticojejunostomy. Operative time was not different from other patients who were primarily resectable. None of the patients had any immediate postoperative complications and were discharged after 5 days. These patients had a median survival of 9 weeks (7-12 weeks). All patients presented with extensive metastasis.

Conclusions

Resection in metastatic GBC patients who became resectable after chemotherapy does not offer any survival advantage. Our sample size is too small to make any recommendation, necessitating the need for further studies.

Sp06 - Improvement in Quality of Life with Treatment in Chronic Venous Disorder Patients in Kandy, Sri Lanka

Zhen Luan Low, Kuda Banda Galketiya, John Carson Allen, Truls Ostbye, Si Ying Julienne Keong, Hiang Khoon Tan

Duke-NUS Medical School, Singapore

Singapore

Introduction

Chronic venous disease (CVD) is a progressive disease if left untreated. Treatment can reduce symptoms and prevent complications, and improve quality of life (QoL). This study assessed how CVD treatment improved the QoL of patients in Sri Lanka.

Methods

A prospective cohort study of 58 patients was conducted. Patients were newly or previously diagnosed with CVD but untreated, and categorized into surgical, non-surgical and no-treatment groups. CVD symptom severity and clinical severity were assessed using the Verbal Numeric Scale and CEAP classification respectively. QoL was assessed by the CIVIQ-14 before treatment and at 4 and 8 weeks after treatment.

Results

25.9% of patients had mild CVD (C2) while 74.1% had severe CVD (C3 – C6). At 8 weeks, the improvement in Global CIVIQ-14 scores from baseline for the surgical group was largest with least squares (LS) means of 23.5 (from 71.0 to 95.9), while the non-surgical and no-treatment groups improved by 13.3 (from 75.9 to 85.6) and 0.333 (from 64.1 to 72.7) respectively (p <0.001). Significant differences in change from baseline LS means were 23.2 (p <0.001) between the surgical and no-treatment groups, and 12.9 (p = 0.037) between the non-surgical and no-treatment groups. The same positive trend was observed for Pain, Physical and Psychological scores at 8 weeks, and for Global, Physical and Psychological scores at 4 weeks.

Conclusions

Both surgical and non-surgical treatments improved QoL and reduced symptom severity of CVD patients. Our study reaffirmed that QoL can be an important clinical measure of treatment outcomes besides technical success.

SP07 - Improvement in Quality of Life amongst Patients with Haemorrhoids after Invasive Treatment in Kandy, Sri Lanka.

Si Ying Julienne Keong, Meegahalande Durage Lamawansa, John Carson Allen, Hiang Khoon Tan, Zhen Luan Low, Truls Ostbye

**Duke-NUS Medical School, Singapore
Singapore**

Introduction

Haemorrhoids is a common chronic disease that affects millions, especially those above 50 years old. Lower grade haemorrhoids can be associated with severe symptoms that impact well-being. Yet, few studies have evaluated disease-specific quality of life (QoL) of patients with haemorrhoids, especially pre- and post-treatment. This study investigated the QoL of patients with haemorrhoids before and after invasive treatment (sclerotherapy, rubber band ligation, haemorrhoidectomy, or evacuation of haematoma).

Methods

A prospective observational cohort study of 58 patients with haemorrhoids was conducted at 2 public hospitals in Kandy, Sri Lanka. Two questionnaires that assessed symptom severity and haemorrhoid-specific QoL were administered at initial consult and at 4-week and 8-week follow-up.

The main outcome variable is the change of QoL score from baseline, measured using the Short Health Scale adapted for Haemorrhoidal Disease (4 domains: Symptom Load, Interference, Concern, General Well-being).

Results

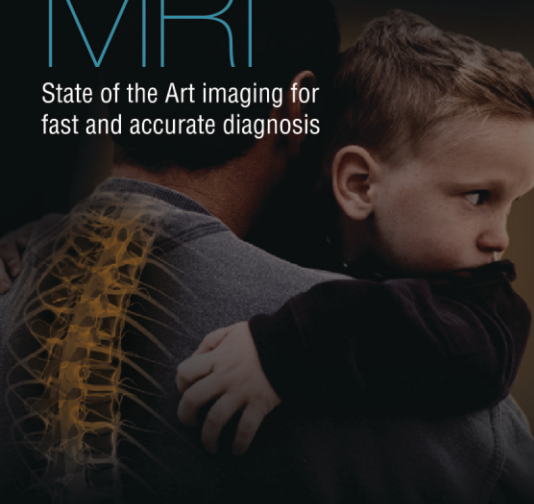
LS mean change from baseline showed significant improvement of QoL across all domains and Total SHSHD Score at 4-week and 8-week follow-up ($p < 0.0001$). The difference in LS mean change from baseline also showed that QoL continued to improve from week 4 to week 8 ($p < 0.01$). Concern showed greatest improvement at weeks 4 and 8 ($p < 0.0001$). Averaged LS mean changes from baseline showed RBL had greater improvement of QoL compared to Sclerotherapy ($p = 0.0041$).

Conclusion

Patients with haemorrhoids had improved QoL after invasive treatment. Haemorrhoid-specific QoL is an important component of the extent of disease and can serve as an aid for surgeons to guide treatment, assess outcomes and monitor disease.

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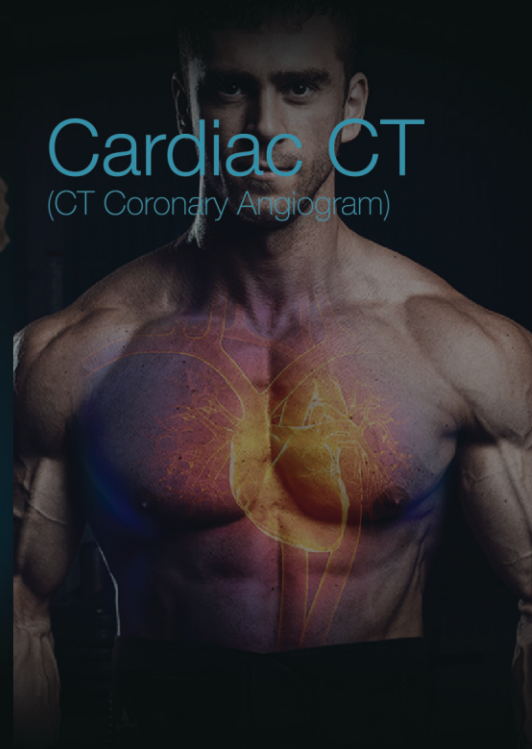
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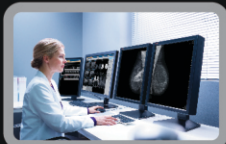
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