P1

AERO SELF EXPANDING HYBRID STENT FOR CENTRAL AIRWAY STENOSIS: A 1 YEAR REVIEW OF OUR EARLY EXPERIENCE

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Aim: AERO stent is a readily available airway stent that can be used emergently, with various sizes available according to imaging findings. This eliminates the need to await tailor made stents to be custom made. AERO stent can be deployed via direct visualization or over the wire. This study aims to review our early experience of its use for central airway obstruction.

Methods: Patients with central airway obstruction treated at our center from July 2019 to June 2020 with airway stenting done were analyzed. Age, cause of stenosis, type of stent, number of stents used and its complications, as well as mortality were analyzed.

Results: Twelve patients with a mean age of 59 who underwent airway stenting were included. Most patients suffered from advanced malignancies. 11 were caused by esophagus, lung and anal canal cancer while 1 was due to tuberculosis. One patient received 2 Dumon stents followed by 2 AERO stents. One patient received 2 AERO stents. Four patients received one AERO stent, three patients received one Dumon stent, three patients received tre-Y-stents. Of the AERO stent group, one patient had radiologically proven stent migration requiring reintervention. In the non-AERO stent group, one patient had stent erosion but did not require reintervention. 8 patients survived to discharge (66.7%), there were five 30-day mortalities (41.7%). No patients died from stent complications.

Conclusions: Use of the readily available AERO stent at our center appears to be a safe and effective means of treating patients with central airway obstruction.

P2

TRAUMATIC AORTIC TRANSECTION AND ENDOVASCULAR TREATMENT: 13 YEARS EXPERIENCE OF A SINGLE CENTER

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Aim: Acute traumatic aortic transection commonly affects the proximal descending aorta with high risk of rupture and mortality. Open descending aortic replacement is associated with high perioperative mortality. Endovascular treatment developed in last decades showed promising results as a safer option. Aim of this article is to review our experience with endovascular treatment for acute traumatic aortic transection.

Methods: From April 2007 to November 29, 2019 patients (mean age 41.5) presented with a diagnosis of traumatic aortic transection, based on the whole body Computed Tomography evaluation during trauma critical care. Total of 13 patients had thoracic endovascular aortic repair (TEVAR) performed in both elective and emergency bases. Perioperative parameters were retrospectively analysed.

Results: The overall 30 days survival was 100% and 1 year survival of 87.5%, there was no recorded procedural related neurological complications. All patients had a zone III transection and at least grade 3 aortic transection. Two patients (15%) noted with Type II Endoleak in follow up scans. There was no stent graft failure, collapse or distal migration were detected.

Conclusions: Outcome of TEVAR performed in emergency settings for polytrauma patients with aortic transection is acceptable. Long term results would be helpful to understand effect of the stent graft in this group of young patients with aortic injury.
CORONARY ARTERY SPASM - AN UNCOMMON CONDITION AFTER CABG

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Aim: Coronary artery bypass grafting (CABG) is one of the most common cardiac surgery done in Hong Kong for ischemic heart diseases. We report a case of a 55-year-old man who demonstrated native coronary artery spasm following on-pump CABG which was managed by intra-aortic balloon pump (IABP) insertion and vasodilators.

Methods: A 55-year-old man, ex-smoker, with history of PVD, presented with unstable angina. CABG was performed and the procedure was unremarkable. 2 hours after operation, patient developed sudden cardiac arrest. Bedside sternotomy was performed, findings was unremarkable. IABP was inserted and later further supported by VA ECMO. Coronary angiogram showed diffuse spasm all three native major coronary arteries, demonstrating competitive flow. All three native coronary arteries responded to Glyceryl trinitrate (GTN) infusion. Two bypass graft (LSV and LIMA) was patent. The coronary artery spasm improved with continuous GTN infusion.

Results: This case illustrates coronary artery spasm, an uncommon post-CABG condition. It has an extremely high mortality and morbidity. It may occur anytime intra-operatively or immediate post-operative. It is still unclear on the actual etiology of coronary artery spasm after CABG. The standard for diagnosis is coronary angiogram, demonstrating diffuse coronary artery spasm responsive to intravenous injection of vasodilator agents. Management includes vasodilators, especially calcium channel blockers, supportive management and Rho-inase inhibitor.

Conclusions: Our patient is fortunate to survive with minimal organ dysfunction and minimal functional impairment. We must be aware of this rare but extremely high mortality post CABG condition, and to act immediately.

VIDEO-ASSISTED THORACOSCOPIC BRONCHIAL SLEEVE LOBECTOMY: A CASE REPORT IN A TERTIARY CARDIOTHORACIC CENTRE

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Aim: For central locating lung tumours, often open pneumonectomy is carried out, but is associated with a wide range of complications. Alternatively, bronchial sleeve lobectomy could be done but it is technically more challenging. We report a case of a 61-year-old man who had a biopsy-confirmed early stage squamous cell carcinoma, undergoing a video-assisted thoracoscopic bronchial sleeve lobectomy, achieving an adequate resection margin and satisfactory post-operative recovery.

Methods: A 61-year-old man, chronic smoker, presented as blood stained sputum. Endobronchial biopsy via bronchoscopy confirmed squamous cell carcinoma. PET-CT showed reactive lymph nodes only without distant metastasis. Right VATS bronchial complete sleeve lobectomy was performed, with end-to-end anastomosis between RMB distal margin and RBI proximal margin with 3/O PDS continuous suture. Pleura and azygos vein were mobilized for coverage of bronchial anastomosis. Post-operative recovery was unremarkable.

Results: The final histopathological examination confirmed moderately differentiated squamous cell carcinoma. Right upper bronchial wedge re-resection margin was confirmed to be clear. A course of adjuvant chemotherapy was given Bronchoscopy performed 3 months after surgery showed appropriate healing without stenosis. Patient remained asymptomatic during the six-month long monitoring.

Conclusions: Bronchial sleeve lobectomy is still not widely practiced due to its technically challenging bronchial reconstruction. Thus, VATS bronchial sleeve lobectomy is ought to be performed only by technically skilled surgeons in experienced centers at this moment. With advancements in technology, it would be encouraging to see more VATS bronchial sleeve lobectomy to be performed in more centers and may replace open pneumonectomy in selected patients.
P5

NOVEL DIAPHRAGMATIC RECONSTRUCTION TECHNIQUE FOR RECURRENT DIAPHRAGMATIC HERNIA

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Aim: To demonstrate the novel design of diaphragmatic hernia repair through a case report of recurrent diaphragmatic hernia presented with acute closed-loop intestinal obstruction.

Methods: We reviewed the clinical notes, operative record and radiological images of the patient who presented with acute intestinal obstruction secondary to the recurrent diaphragmatic hernia and had undergone a neo-diaphragmatic hernia repair.

Results: A 51-year-old lady with history of repaired congenital diaphragmatic hernia was admitted for small bowel intestinal obstruction due to incarcerated bowels through a diaphragmatic hernia. Emergency laparotomy for reduction of herniated contents and thoracotomy for reconstruction of a neo-diaphragm with a xenograft was done. A novel medial flutter valve design of the neo-diaphragm was fashioned to avoid injury to esophagus and inferior vena cava.

Conclusions: Reconstruction of the diaphragm with a xenograft with a flutter-valve design for traversing esophagus and inferior vena cava is effective and with good mid-term outcome.

P6

EXPERIENCE OF DIAPHRAGMATIC HERNIA IN EMERGENCY SETTING: 20 YEARS STUDY IN SINGLE CLUSTER

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Aims: Diaphragmatic hernia with internal organ herniation is not commonly encountered in emergency admission while mortality and morbidities may result if remained untreated. This study aims to review the features, surgical approach and outcome of diaphragmatic hernia in emergency setting in a single cluster.

Methods: Patients aged 10 or above and underwent emergency operation for diaphragmatic hernia in 2000-2020 under New Territories West Cluster were reviewed.

Results: Totally 11 patients were included. The mean age is 51.8. 45.5% are female patient. Most of the patient presented with abdominal pain (55%), vomiting (27%) or combination of these symptoms (18%). 91% of the cases diagnosed with CT while 9% diagnosed with CXR. The type of hernia included right bochdalek hernia (18%), left bochdalek hernia (37%) and hiatus hernia (36%). The most commonly herniated organ was stomach and colon while small bowel, omentum and spleen were herniated in some cases as well. 75% of the cases underwent laparotomy surgery while 25% had laparoscopic surgery. Mesh repair was performed in 36% of the cases, 64% had no mesh applied. Fundoplication was performed in same operation in 46% of the patients. All cases did not require gut resection. The mean of post-operation hospital stay is 14.6 days. 30 days mortality is 18.2% (not surgery related for example, chest infection, underlying malignancy progression). There was no significant surgical comorbidity.

Conclusions: Diaphragmatic hernia though is not commonly seen in emergency setting but remains an important differentiate diagnosis to non-specific symptoms. Surgical repair is safe without significant morbidity in this series.
P7

A RARE BUT LETHAL COMPLICATION: POST-ERCP CEREBRAL ARTERIAL GAS EMBOLISM

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Case report: Post-ERCP cerebral arterial gas embolism of iatrogenic air embolism is a rare and potential fatal complication of gastrointestinal endoscopy. We present a 66-year old gentleman who developed cerebral arterial gas embolism shortly after therapeutic endoscopic retrograde cholangiopancreatography (ERCP) for acute biliary pancreatitis, which is the first case reported in Hong Kong according to latest literature search. Some risk factors of iatrogenic air embolism in this patient include cholangitis with intraductal stones, sphincterotomy and bleeding at papillotomy site which required haemostasis with balloon tamponade. Early diagnosis and timely treatment with hyperbaric oxygen therapy resulted in full neurological recovery of our patient.

P8

PROLONGED CHOLECYSTECTOMY WAITING TIMES FOR COMPLICATED GALLSTONES DISEASE WAS ASSOCIATED WITH INCREASING RATE OF GRAM-NEGATIVE BACTERIAL INFECTION

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Background: Early cholecystectomy for complicated gallstone disease is safe and has short hospital stay. However, there is no consensus about the timing of cholecystectomy for complicated gallstone disease in Hong Kong.

Methods: Retrospective review of all cholecystectomy performed in one of the regional network in Hong Kong which consist of three hospitals is performed. Data were retrieved from Hospital Authority administrative database from January 2015 to December 2019. Emergency cholecystectomy and patients requiring cholecystectomy not due to gallstones were excluded. Relationship between cholecystectomy waiting time and patients outcome were analyzed.

Results: There are 1931 patients with cholecystectomy done from January 2015 to December 2019. 723 patients underwent emergency cholecystectomy and 82 patients receiving cholecystectomy not related to gallstone disease were excluded. 1126 patients were recruited in this study. The median operation waiting time were 184 days. 10% of the cohort have waiting time more than 460 days. Post-operative readmission rate and mortality rate were 5.5% and 0.2% respectively. There was no significant difference in re-admission rate, mortality rate and post-operative hospital stay according to operation waiting time. Thirty-five patients (3.1%) developed Gram-negative bacilli in bile or blood while waiting for surgery. Patient with operation waiting time more than 10 weeks had a significant higher \( P = .019 \) positive blood or bile culture rate.

Conclusions: Patients having cholecystectomy waiting time greater than 10 weeks were associated with higher rate of infective episodes requiring hospital admission. To avoid Gram-negative infection in patients with complicated gallstone disease, early cholecystectomy within 10 weeks is recommended.

P9

TRABECULAR BONE SCORE AS A POTENTIAL PREDICTOR OF BONE IMPROVEMENT AFTER PARATHYROIDECTOMY

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Background: The current skeletal indication for parathyroidectomy for primary hyperparathyroidism (PHPT) is based on bone mineral density (BMD) T-score < −2.5. The role of trabecular bone score (TBS), a novel marker of bone quality, in the management of primary hyperparathyroidism is unknown. We studied BMD and TBS changes among Chinese who underwent curative parathyroidectomy for PHPT.

Methods: Consecutive Chinese individuals who underwent curative parathyroidectomy during 2002-2015 for PHPT, and completed preoperative and postoperative BMD and TBS measurements with the same densitometer in Queen Mary Hospital were recruited. Correlations between preoperative parameters and changes in BMD and TBS were studied.

Results: 45 Chinese individuals (13 men, 32 women) were included (mean age 62.0 ± 10.0 years and BMI 24.6 ± 4.7 kg/m2). The median follow up time was 1 year. After parathyroidectomy, BMD at lumbar spine (LS) improved by 6.7% \( P < .001 \) while TBS did not change. Among women, peak preoperative parathyroid hormone and calcium levels independently predicted lumbar spine (LS) BMD gain. Among women with BMD in non-osteoporotic range \( T < −2.5 \), preoperative TBS was the only significant variable inversely correlating with percentage change in LS BMD \( ρ = −0.775, P = .005 \). Particularly, those with preoperative TBS ≤1.25 gained 7.1% LS BMD post-parathyroidectomy \( P = .003 \).

Conclusions: Among non-osteoporotic PHPT women, preoperative TBS inversely correlated with postoperative BMD improvement. Moreover, those with worse preoperative TBS benefit more from surgery. Hence, low preoperative TBS may be an additional indication for surgical benefit after parathyroidectomy.
P10

CLINICAL OUTCOMES OF ESOPHAGECTOMY IN ADVANCED AGE PATIENTS - A SINGLE CENTER EXPERIENCE

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Background: Esophagectomy for cancer is associated with high operative mortality and morbidities. With increasing life expectancy, there are increasing number of patients diagnosed with esophageal cancer in advanced age. We reviewed the feasibility and safety in advanced age patient undergoing esophagectomy.

Methods: A single center retrospective cohort study was performed for patients underwent esophagectomy for cancer from January 2015 to June 2020. These patients were divided into two groups: group I (age < 70), group II (age ≥ 70). The two groups were compared according to the baseline characteristics of patients and tumor, surgical approaches, perioperative parameters, short term complications, hospital stay and short-term mortality rate.

Results: 68 patients underwent minimal invasive esophagectomy between the study period, 41 patients were in group I and 27 patients were in group II. The baseline characteristics were similar. There was no significant difference for overall post-operative complication rate with Clavien-Dindo grade II or above (31.7% vs 25.9%, P = .810), perioperative blood loss (225.4 mL vs 198.9 mL, P = .855), operative time (460 minutes vs 435 minutes, P = .471), median length of hospital stay (12 days vs 14.5 days, P = .452), 30-days mortality (0% vs 3.7%, P = .97) and 90-days mortality (4.9% vs 3.7%, P = 1.000). While in subgroup analysis, patients with advanced age tended to have more perioperative chest infection (19.5% vs 59.2%, P = .002).

Conclusions: Esophagectomy is safe and feasible in selected advanced age patient with limited comorbidity without increasing overall perioperative complications, length of hospital stay and short term mortality.

P11

REVIEW OF CLINICAL PRESENTATION, PERIOPERATIVE AND EARLY POST-OPERATIVE OUTCOMES OF PULMONARY EMBOLISM AFTER MAJOR SURGERIES

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Aim: To review the clinical presentation, perioperative and early post-operative outcomes of pulmonary embolism after major surgeries.

Methods: Data from the Surgical Outcomes Monitoring and Improvement Program (SOMIP) on all major and ultra-major surgeries in Tuen Mun Hospital and Pok Oi Hospital from year 2008 to 2019 were reviewed. Clinical presentation, perioperative and early post-operative outcomes for patients with post-operative pulmonary embolism were analyzed.

Results: From 2008 to 2019, 20,572 patients underwent major or ultra-major operation in Tuen Mun Hospital or Pok Oi Hospital. 34 (0.17%) of them had post-operative pulmonary embolism. The most common clinical presentation was dyspnea or desaturation (61.8%), followed by tachycardia (50.0%). 6 (17.6%) of them had sonographic evidence of deep vein thrombosis. Blood for D-dimer was taken in 7 patients with pulmonary embolism in perioperative period. All of them had elevated D-dimer. All cases of pulmonary embolism were diagnosed by CT pulmonary angiogram. Mean time from index operation to diagnosis of pulmonary embolism was 7.00 ± 4.82 days. 30-day mortality after diagnosis of pulmonary embolism was 14.7%.

Conclusions: Pulmonary embolism was diagnosed in 0.17% of patients underwent major or ultra-major surgeries. The most common clinical presentation was dyspnea or desaturation, followed by tachycardia. 30-day mortality was 14.7%.

P12

CORRELATION OF PREOPERATIVE MAGNETIC RESONANCE IMAGING STAGING AND PATHOLOGICAL STAGING IN RECTAL CANCER AFTER NEOADJUVANT THERAPY

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Aim: To determine the correlation of preoperative MRI staging and pathological staging in rectal cancer after neoadjuvant therapy in our center.

Methods: This was a retrospective cohort study which included patients, with histologically confirmed rectal adenocarcinoma, who have received neoadjuvant therapy in the period of May 2016 to December 2019. Preoperative MRI was done for all patients. Patients who did not receive operation were excluded in this study. The correlation of preoperative MRI staging and the pathological staging was measured using kappa coefficient (κ value). The sensitivity, specificity, positive and negative predictive value of detection of regional lymph node metastasis were calculated.

Results: During the period of this study, 68 patients were diagnosed to have rectal cancer and underwent both neoadjuvant therapy and curative surgery. κ value for T-staging of these patients was 0.237 (P < .0005), which suggested “fair” agreement. Accurate preoperative T-staging was achieved in 32 patients (47.1%). Over-staging was seen in 30 patients (44.1%) and under-staging in 6 patients (8.8%). While κ value for N-staging was 0.134 (P < .05), which suggested “slight” agreement. 40 patients (58.8%) were over-staged by preoperative MRI. Accurate N-staging was seen in 25 patients (36.8%). Sensitivity of detection of regional lymph node metastasis...
was 94.7% and specificity was 28.6%. Positive predicted value and negative predicted value were 34.0% and 93.3% respectively.

Conclusions: This study revealed that preoperative MRI staging tended to over-stage rectal cancer after neoadjuvant therapy in both T- and N-staging in our centre.

P13

DIAGNOSTIC PERFORMANCE OF TRANSIENT ELASTOGRAPHY AND CLINICAL SCORING SYSTEMS FOR LIVER FIBROSIS STAGING IN MORBIDLY OBSESE PATIENTS WITH NON-ALCOHOLIC FATTY LIVER DISEASE

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Background and Aim: Transient elastography (TE) and different clinical scoring systems are non-invasive methods in predicting liver fibrosis in non-alcoholic fatty liver disease (NAFLD) but limitations in obese patients are common among these methods. This study aims to compare the discriminative ability of TE and different scoring systems in diagnosing liver fibrosis in morbidly obese patients.

Methods: This study prospectively recruited 37 morbidly obese Chinese patients who received intraoperative liver biopsy during laparoscopic bariatric surgery. All patients received preoperative TE and baseline biochemical data were collected. The sensitivity (SN), specificity (SP), positive predictive value (PPV), and negative predictive value (NPV) of TE, FIB-4 score, APRI score and NAFLD fibrosis score in diagnosing advanced fibrosis were estimated using fibrosis staging by liver biopsy as gold standard (F ≥3 advanced fibrosis).

Results: In 37 patients recruited, mean BMI was 41.14 ± 5.58 kg/m². Patients who had F1, F2, F3, F4 fibrosis grade were 13 (35.1%), 10 (27%), 3 (8.1%) and 11 (29.7%) respectively. AUROC for F ≥3 of LSM and NAFLD score were 1.0 (P = 0) and 0.739 (P = .016) while AUROC of FIB-4 and APRI score were 0.461 (P = .69) and 0.477 (P = .81) respectively. Optimal cutoff value of LSM for diagnosing advanced fibrosis was 10.1 kPa with 100% SN, 85% SP, 85% PPV and 52% NPV. Optimal cutoff value of NAFLD fibrosis score was −1.42 with 85% SN, 65.2% SP, 85% PPV and 52% NPV.

Conclusions: LSM and NAFLD showed superior discriminative ability for patient suffering from liver fibrosis and NAFLD.

P14

BEHIND THE SCENE OF A PALPABLE HEAD MASS: SKULL METASTASIS FROM FOLLICULAR THYROID CARCINOMA: A RARE CASE REPORT AND LITERATURE REVIEW

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Aim: Skull metastasis of follicular thyroid carcinoma is rare. The initial presentation is usually indistinct with a head mass. Diagnosing the primary malignancy is challenging. Multidisciplinary approach is required for diagnosis and treatment.

Methods: We illustrate with a rare case report of 77-year-old lady, who initially presented with a palpable head mass and later confirmed the primary lesion was follicular thyroid carcinoma. The clinical course and treatment were described. Literature review on the presentation, diagnosis and treatment was discussed.

Results: She initially presented with a palpable head mass. Serial CT brain showed left frontoparietal lytic lesion with soft tissue component with interval enlargement. Incisional biopsy of the left scalp lesion was performed. The pathology showed features of carcinoma, favoring thyroid origin. CT scan of the thorax & ultrasound of the thyroid showed a 1 cm right lobe calcified nodule. USG guided fine needle aspiration of right nodule came back to be benign follicular nodule. Total thyroidectomy was done. The pathology report confirmed the nodule with size 12 mm × 11 mm × 6 mm represented a minimally invasive follicular carcinoma with extracapsular invasion, likely pT1b.

Conclusions: Diagnosing skull metastasis from follicular thyroid carcinoma is challenging. This case highlights the particular presentation of thyroid carcinoma and emphasizes the importance of early identification of the primary malignancy. Multi-disciplinary approach is usually required to reach the diagnosis and treat the disease.

P15

PROGNOSTIC FACTORS OF ISCHEMIC COLITIS IN ELDERLY PATIENTS

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Background & Aim of Study: Ischemic colitis is a common condition that clinicians encountered in their daily practice. The aim of this study was to identify factors leading to poor prognosis & mortality in elderly patients with ischemic colitis.

Methods: A 5-year retrospective study of patients admitted to Queen Elizabeth Hospital during 2014 to 2019 with ischemic colitis diagnosed using Computed Tomography.
Results: A total of 56 patients (28 males & 28 females; mean age 79.9) were diagnosed with ischemic colitis. 12 of them underwent surgery and 44 of them were managed conservatively. 27 out of the 56 patients passed away during the same admission (58% in surgery group and 45% in conservative group), either due to ischemic colitis or complications arisen. Upon univariate analysis, risk factors that predicted poor prognosis & mortality within same admission included history of diabetes (P = .041), disease involvement of right colon (P = .048), low blood gas pH value (P = .006), low base excess (P = .001) & albumin level (P = .019) and elevated creatinine level (P = .033) on admission. There was no statistically significant difference in mortality rate between patients underwent surgery and patients underwent conservative management (P = .429).

Conclusions: In elderly patients suffering from ischemic colitis, several risk factors were associated with poor prognosis and mortality. Identifying these factors may facilitate early commencement of intensive care before clinical conditions deteriorate.

P16
DOES INTERNAL PANCREATIC DUCT STENTING AFFECT THE RISK OF POST-OPERATIVE PANCREATIC FISTULAS IN PATIENTS UNDERGOING PANCREATICODUODENECTOMY?
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Background & Aim of Study: Post-operative pancreatic fistulas are a major cause of morbidity & mortality following pancreaticoduodenectomies. The aim of this study is to investigate whether placement of internal pancreatic duct stents affects the rate of post-operative pancreatic fistulas in patients who underwent pancreaticoduodenectomy.

Methods: A 13-year retrospective study of patients who underwent pancreaticoduodenectomy at Princess Margaret Hospital during 2007 to 2019. Univariate analysis and multivariate analysis using binary logistic regression was performed.

Results: A total of 100 patients (64 males & 36 females, mean age 57.8) were included in this study. All of them underwent pancreaticoduodenectomy with pancreatico-jejunal anastomosis performed using a two layer duct to mucosa, modified Blumgart technique. 40% patients had carcinoma of the pancreas, 34% patients had carcinoma of the ampulla of Vater, 13% patients had carcinoma of the common bile duct; and 14% patients suffered from other pathologies, including intraductal papillary mucinous neoplasm, pancreatitis, carcinoma of the duodenum and pancreatic endocrine tumor. 88 out of 100 (88%) patients received prophylactic octreotide. An internal pancreatic duct stent (using infant feeding tube) was inserted intra-operatively in 21 patients. 6 out of 100 (6%) patients developed post-operative pancreatic fistula. Univariate analysis and multivariate analysis using binary logistic regression showed that internal pancreatic duct stenting does not affect risk of post-operative pancreatic fistulas (P = .722), after adjusting the confounding effects of pancreatic duct diameter, intra-operative blood loss and pathology.

Conclusions: Intra-operative internal pancreatic duct stenting does not affect the risk of post-operative pancreatic fistulas after pancreaticoduodenectomy.

P17
MANAGEMENT OF GIANT COLONIC POLYPS (≥3CM) BY ENDOSCOPIC SUBMUCOSAL DISSECTION (ESD) VS SURGERY: A PROPENSITY SCORE-BASED ANALYSIS
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Aim: Giant colonic polyps (≥3 cm) can be managed by endoscopic excision or surgical resection. There has been a shift to endoscopic submucosal dissection (ESD) for treatment of such lesions as the expertise in advanced therapeutic endoscopy develops. This study aims to compare the outcome and safety profile of ESD against surgical resection for patients with giant colonic polyps.

Methods: We performed a retrospective review on patients with giant colonic polyps removed either by ESD or surgery over a 9-year period (from May 2010 to November 2019) in a regional hospital in Hong Kong. Propensity score matching was performed based on patient demographics. Outcomes including polyp histology, treatment modality, complication rates, length of hospital stay and re-admission rates were analyzed.

Results: 51 patients (ESD group: 34, surgery group: 17) were included in the analysis. Mean polyp diameter was 3.35 cm (ESD group) and 3.5 cm (surgery group). The median procedure time were comparable (160 minutes vs 167 minutes, P = .251) and the most common polyp histological type was tubulovillous adenoma (44.1% vs 47.1%, P = .130) for both groups. Shorter mean length of stay (0.79 day vs 6.65 days, P = .028) and lower re-admission rate (0% vs 5.9%, P < .001) were observed in ESD group, whereas higher major complication rate (Clavien-Dindo classification grade IIIa or above) (2.9% vs 11.7%, P = .013) was observed in surgery group.

Conclusions: ESD is a well-established treatment modality for giant colonic polyps. It has the advantage of lower complication rate, shorter length of hospital stay and lower re-admission rate compared to surgical resection.
P18
HYPOMAGNESAEMIA AND PARATHYROID HORMONE LEVEL POST TOTAL THYROIDECTOMY -SIGNIFICANCE AND WORTHINESS OF MONITORING

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Aim: Incidence of transient hypocalcaemia ranged from 0.3% to 65% post total thyroidectomy. A small percentage of patients, nonetheless, do not respond to calcium supplement. Patients with hypocalcaemia and hypomagnesaemia tend to have prolonged symptoms. We aim to evaluate the incidence of hypomagnesaemia in hypocalcaemic patients after elective total thyroidectomy, and to explore the relationship between hypomagnesaemia, calcium (Ca) and PTH.

Materials and Methods: Patients underwent elective total thyroidectomy regardless of indication were included during the period between July 2019 and June 2020. Outcome variables included pre/post-op magnesium (Mg) levels, pre/post-op Ca and PTH levels, phosphate level, operation details and symptoms. Continuous variables were expressed as mean ± SD.

Results: A total of 44 patients were included. 84% were female (n = 22). Age ranged between 20 and 80 (mean = 46.9). The mean operation time was 106 minutes. Incidence of hypomagnesaemia was 7% (n = 3). Incidence of symptomatic hypocalcaemia was 4.5% (n = 2). Hypoparathyroidism rate was 34%. Incidence of hypocalcaemia and hypophosphatemia were both 13.6% (n = 6). There was a significant association between postoperative calcium level and postoperative PTH level in Day 1 (P < .001). There was a trend of relationship between postoperative magnesium level and PTH level in Day 1 but has yet reached statistical significance (P = .07). There was no statistical significance demonstrated between postoperative magnesium and calcium level.

Conclusions: Hypomagnesaemia post total thyroidectomy has yet been shown to be related to postoperative calcium level. There is a statistical significance between postoperative calcium and PTH levels. The clinical value of routine monitoring of pre and postoperative magnesium level is questionable.

P19
RADIOThERAPY AND IMPLANT-BASED BREAST RECONSTRUCTION: A REVIEW OF OUTCOMES

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Introduction: Implant-based breast reconstruction is a popular method for reconstruction after mastectomy for breast cancer. However, published data on outcomes of radiation and implant based breast reconstructions is conflicting. This study aims to examine the associated complications related to prosthetic reconstruction in the setting of irradiation to the chest wall.

Methods: This is a single-centre retrospective study analysing data from January first, 2008 to December 31st, 2017 for implant-based breast reconstruction procedures post-mastectomy. Procedures included implant placement and latissimus dorsi (LD) flap with implant. The 30-day complication and re-operative complication rates were calculated. Associated risk factors were identified.

Results: There was a total of 47 prosthetic based breast reconstructions, 19 received irradiation and 28 did not receive irradiation. All patients received an immediate breast reconstruction after mastectomy and all were single staged. The overall complication rate was comparable between the two groups, at 21.1% and 21.4%, P = .975, respectively for the irradiated and non-irradiated group. The rate for major complications were also similar between the two groups, 10.5% and 7.1%, P = .683. The rate of severe capsular contracture (Baker's III and IV) between the irradiated and non-irradiated patients was similar, 5.3% and 7.1%, P = .796.

Conclusions: This review suggests that radiotherapy in prosthetic based breast reconstruction is feasible and safe. Failure rates in both groups are not clinically and statistically significant, thus questions the role of expander insertion and a two-stage operation in the setting of radiotherapy. Implant insertion remains a valid choice for these patients and is an alternative to autologous flaps.

P20
THE APPLICABILITY OF THE ACOSOG Z0011 CRITERIA TO BREAST CANCER PATIENTS IN HONG KONG

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Aim: The ACOSOG Z0011 trial demonstrated safe omission of axillary lymph node dissection (ALND) in patients with one or two positive sentinel lymph nodes (SLNs) receiving breast conservative surgery, followed by whole breast irradiation and adjuvant systemic treatment. This study aims to evaluate the exportability of the ACOSOG Z0011 criteria in the Hong Kong population.

Methods: Retrospective analysis of a prospectively maintained database was performed from June 2014 to May 2019. All breast cancer patients with no palpable adenopathy before surgery, one or more positive sentinel lymph nodes on histological examination and no prior neoadjuvant systemic treatment were recruited. Patients were grouped as eligible or ineligible according to the ACOSOG Z0011 criteria. The eligible group was compared with the sentinel alone group in the ACOSOG Z0011 cohort.

Results: Two hundred and forty-eight patients were recruited into the study. Sixty patients (24%) met the ACOSOG Z0011 criteria and could potentially avoid ALND. A higher percentage of clinical T2
tumors were observed in our eligible group than in the sentinel alone arm of the ACOSOG Z0011 trial ($P = .002$). The histological subtype, tumor grade, estrogen receptor (ER)/progesterone receptor (PR) status and lymphovascular invasion status did not differ. There was no statistically significant difference in the proportion of SLN micrometastasis and macrometastasis between the two groups.

Conclusions: This study demonstrated clinical similarities between our eligible cohort and the ACOSOG Z0011 cohort, which confirmed good exportability of the ACOSOG Z0011 criteria to our population in Hong Kong.

P21

PREGNANCY-RELATED BREAST CANCER: 13-YEAR EXPERIENCE IN A TERTIARY INSTITUTION IN HONG KONG

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Background: The incidence of pregnancy-associated breast cancer is increasing. Its tumour characteristics and overall survival compared with those in non-pregnant patients remain controversial. While there have been suggestions that pregnancy-associated cancers have a 40% increase in risk of death compared to those of the non-pregnant patients, other studies suggested similar disease outcome. This study aims to review our local experience with pregnancy-associated breast cancer.

Methods: Twenty-eight patients diagnosed of pregnancy-associated breast cancer and 28 patients diagnosed at pre-menopausal age randomly selected during the same period were recruited. Background characteristics, tumor features and survival were compared.

Results: Among the 28 pregnant patients, 17 were diagnosed during pregnancy and 11 were diagnosed in postpartum period. Compared to the non-pregnant breast cancer patients, they presented with larger tumour size ($P = .02$), less progesterone receptor-positive tumour ($P = .03$). Although there was no significant difference in overall nodal status ($P = .16$), they tended to have more nodal involvement. There was also a trend of delayed presentation to medical attention, with mean duration of 13.2 weeks in the pregnant group and 7.5 weeks in the non-pregnant group. However, the overall survival did not differ ($P = .63$).

Conclusions: Pregnancy-associated breast cancer is of increasing incidence. Although overall survival is similar to non-pregnant patients, they present with more aggressive features but tend to seek delayed medical attention. A multidisciplinary approach is beneficial.

P22

PREDICTORS FOR UPSTAGING PATHOLOGY IN CORE-BIOPSY DIAGNOSED ATYPICAL DUCTAL HYPERPLASIA

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Aim: Atypical ductal hyperplasia (ADH) is found to be a lesion malignant potential. The purpose of this study is to review data from a regional public hospital to evaluate predictors for diagnosing breast carcinoma from ADH on initial core biopsy.

Methods: Patients who were diagnosed to have ADH on core biopsy from September 2009 to July 2018 in Tuen Mun Hospital and underwent further investigations were identified. Patients were included if ADH made up the main bulk of lesion. Patients were excluded if concurrent carcinoma was found. The relationship between patient factors (age, smoking status, family and personal history of breast carcinoma), physical examination findings (palpability, size), radiological findings (BIRADS grading, size on ultrasound, asymmetry, density of breast), pathological features on core biopsy (oestrogen receptor status, presence of micro-califications) and final pathology were investigated. Analysis was performed with logistic regression on SPSS 20.

Results: There were total 106 patients identified in this study cohort with all of them being females. 44 patients (41.5%) had upstaged pathology. Using univariate analysis, predictors include smoker ($P = .032$), size on physical examination ($P = .019$), presence of micro-califications ($P = .000$), size on USG ($P = .000$) and BIRADS grading ($P = .000$). Upon multivariate analysis, BIRADS grading was the only significant predictor for upstaging pathology in patients diagnosed with ADH on initial core biopsy ($P = .011$).

Conclusions: BIRADS grading on mammogram and ultrasound is the only predictor for upstaging pathology from ADH to carcinoma of the breast.

P23

HEPATOCELLULAR CARCINOMA WITH DIAPHRAGMATIC INVASION: OUTCOME AND PROGNOSIS

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Aim: Hepatocellular carcinoma (HCC) with diaphragmatic invasion is often upstaged by definition in the TNM classification owing to
involvement of the visceral peritoneum. Its survival outcome and prognostic impact, however, remains uncertain.

**Methods:** We reviewed a prospectively maintained database of 1728 patients who underwent surgical resection for HCC between 1997 and 2017. Patients with en bloc diaphragmatic resection (DR) at time of hepatectomy were included, and matched to HCC patients without DR at a ratio of 1:5.

**Results:** 116 HCC patients had en bloc DR, of which 36 had histopathological diaphragmatic invasion. The diaphragm was repaired either primarily (n = 105) or by mesh repair (n = 11). None developed diaphragmatic hernia. 36 DR patients were matched to 180 HCC patients without DR by tumour size and number. Majority of patients in both groups received major hepatectomy [148/180 (82.2%) vs 33/36 (91.7%, P = .205)]. There was no difference in operating time, hospital stay, and hospital mortality, but patients in the DR group were more likely to have grade 3a or above periperooperative complications. They have higher risk of involved resection margins (13.9% vs 3.9%, P = .0048), a greater tendency for microvascular invasion (83.3% vs 67.8%, P = .062), and were more likely to develop extra-hepatic metastasis after hepatectomy (30.6% vs 12.8%, P = .028). 5-year OS were 23.0% and 37.1% (P = .043), while 5-year DFS were 13.3% and 20.2% (P = .206) for the DR and non-DR groups respectively.

**Conclusions:** HCC with diaphragmatic invasion is associated with aggressive tumor features. Overall survival was inferior due to increased risk of extra-hepatic metastasis.

P24

**EFFECT OF PREPERITONEAL PACKING ON OUTCOME OF PATIENTS WITH PELVIC FRACTURE**

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**Introduction:** Evidences on pelvic fracture management regarding the use of external fixation, pre-peritoneal packing (PPP) and angioembolization were controversial. This study aims at investigating the efficacy of PPP among patients with different responses to initial fluid resuscitation.

**Methods:** Pelvic fracture patients admitted to Queen Mary Hospital in 2010-2019, with abbreviated injury scale of 3 and above, were retrospectively reviewed. Patients were stratified into transient or non-responders (TNR), rapid responders (RR) and hemodynamically stable (HS) group. Primary outcome was mortality rate. Secondary outcomes include transfusion requirement and length of stay.

**Results:** 76 patients were reviewed including 18 transient and non-responders, 18 rapid responders and 40 hemodynamically stable patients. PPP was performed in 44%, 11% and 0% of patients in TNR, RR and HS group respectively (P < .001). Compared to RR and HS group, TNR group had higher 30-day mortality rate (33.3% vs 16.7% vs 2.5%, P = .005), more packed cells transfused (18.4 vs 11.3 vs 1.8 units, P < .001) and longer ICU stay (16.6 vs 12.3 vs 4.1 days, P = .002). TNR group patients treated with or without PPP had no difference in 30-day mortality (37.5% vs 30%, P = 1.0), total packed cells transfused (26.8 vs 11.8 units, P = .101) and ICU stay (14.4 vs 18.4 days, P = .633). All RR and HS group patients treated without PPP survived, except three mortalities due to intracranial hemorrhage and unrelated to pelvic fracture.

**Conclusions:** Rapid responders and hemodynamically stable patients can be treated without PPP with non-inferior outcomes.

**P25**

**PREDICTIVE FACTORS FOR OVERALL AND DISEASE-FREE SURVIVAL FOR SPLENIC FLEXURE TUMOR**

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**Introduction:** Operative approach for splenic flexure tumor is controversial due to the variation in blood supply compared with other standard colectomy. This study aimed at reviewing the factors affecting overall and disease-free survival in patients with splenic flexure tumor regarding different surgical approaches and clinico-pathological characteristics.

**Methods:** Patients with splenic flexure tumor resection done in 2013 to 2017 in the New Territories East Cluster was retrospectively reviewed. Primary outcome was overall survival. Secondary outcome was disease-free survival. Kaplan-Meier analysis was performed for risk factors of overall and disease-free survival. Independent risk factors were determined by multivariate analysis with Cox regression. Pvalue of <.05 was considered statistically significant.

**Results:** 128 patients were included in total with a median age of 67. The mean overall and disease-free survival was 40.3 and 36.1 months respectively. Harvested lymph nodes less than 12 (P = .001), perineural invasion (P = .005) and absence of adjuvant chemotherapy (P < .001) were independent risk factors for shorter overall survival. Tumor perforation (P = .022), poorly differentiated tumor (P = .019) and wound complications (P = .015) were associated with significantly inferior disease-free survival. Choice of operative approach was neither a significant risk factor for overall survival (P = .684) nor disease-free survival (P = .332).

**Conclusions:** Approach to ensure a minimum of 12 harvested lymph nodes was a significant prognostic factor to improve overall survival regardless of the type of colectomy. Tumor perforation and poorly differentiated tumor were strong indications for adjuvant chemotherapy to prevent recurrence.
**P26**

**A SOLUTION FOR TRAUMA SYSTEM DEVELOPMENT IN MAINLAND CHINA: 6 YEARS OF PRACTICE IN SHENZHEN**

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**Aim:** Trauma system development in mainland China is still in its infancy. International experience has shown that trauma system development significantly reduces preventable trauma deaths and disabilities. The study is aimed at proffering solution for trauma system development in mainland China.

**Methods:** During a 6-year period of practice in Shenzhen, a team was established to introduce the advanced trauma life support (ATLS) program, perform a geographical analysis of traumatic accidents, and establish a regional trauma center. In addition, a multi-party committee was formed to finalize the trauma care plan for the designated hospital, and trauma audit meetings were introduced to improve trauma quality.

**Results:** ATLS program was established in mainland China. The results of the geographical analysis of traumatic accidents showed that trauma patients were highly clustered. A regional trauma center was established and ATLS principles were adopted as a standard for early trauma care. The results showed a significant improvement in trauma resuscitation and a significant reduction in mortality of major trauma patients. Shenzhen trauma system was developed and trauma audit meeting was introduced in 8 hospitals. The Chinese version of “RESOURCES FOR OPTIMAL CARE OF THE INJURED PATIENT” from ACS-COT will be released in September 2020.

**Conclusions:** The study involved the geographical analysis of trauma accidents, trauma training, trauma center development, center designation and quality improvement. All of these constitute a solution for trauma system development. This study has been proven effective, thus can be repeatable. Consequently, it is valuable to extend to other parts of mainland China.

**P27**

**INSTILLATION OF UROKINASE AFTER BURR HOLE DRAINAGE OF CHRONIC SUBDURAL HEMATOMA**

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**Background and Objective:** Chronic subdural hematoma is a common disease in neurosurgery with annual incidence of 21 per 100,000. Recurrence necessitating re-operation affects postoperative functional outcomes. Instillation of Urokinase via subdural drain after burr hole drainage for chronic subdural hematoma has been reported to reduce recurrence and improve outcome. This study aims to investigate the effectiveness and safety profile of instillation of Urokinase in reducing recurrence of chronic subdural hematoma.

**Methods:** This is a retrospective cohort study of all adults with chronic subdural hematoma undergoing burr hole drainage admitted to the Department of Neurosurgery in Pamela Youde Nethersole Eastern Hospital from January 2013 to December 2017. Post-burr hole drainage patients were decided for instillation of Urokinase when post-operative computed tomography of brain showed residual hematoma. Clinical records will be reviewed and analyzed.

**Results:** A total of 297 patients with chronic subdural hematoma were treated with burr hole drainage with male to female ratio 2.2:1 (male 205; female 92) and mean age of 77 (25-100). 100 (33.7%) patients had instillation of Urokinase with a mean total dose of 15,800 units over an average of 2 days. The recurrence rate was significantly lowered in patients with instillation of Urokinase. (with Urokinase 8.0%; without Urokinase 22.8%) \( (P = .002) \). There was no case of central nervous system infection and only 1 case of acute subdural hematoma among patient’s with Urokinase instillation.

**Conclusions:** Instillation of Urokinase after burr hole drainage for patient with chronic subdural hematoma is safe and has significantly reduced recurrence rate.

**P28**

**EFFECT OF REVASCULARIZATION SURGERY ON THE COGNITIVE FUNCTION IN PATIENTS WITH CEREBRAL HYPOPERFUSION**

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**Objective:** To investigate if there is any short term and long term improvement in cognitive function after revascularization surgery in patients with cerebral hypoperfusion.

**Methods:** This was a prospective observational study of all patients with documented cerebral hypoperfusion and had revascularization surgery performed from 1 January 2014 to 31 December 2018. The patient’s demographic was collected and these patients received cognitive and functional assessment immediately prior to the operation, 3, 6 and 12 months after the operation. Paired t test and univariate and multivariate analysis was done to assess the significance of the cognitive improvement and the factors associated with favorable outcome.

**Results:** A total of 45 patients were identified and statistically significant cognitive improvement was observed in 3 months after the operation and the improvement was noted up to 1 year after the operation.

**Conclusions:** Revascularization surgery helps improve the cognitive function of the patients with cerebral hypoperfusion.
**P29**

**DIAGNOSTIC VALUE OF ULTRASONOGRAPHY AS A PRIMARY INVESTIGATION FOR ACUTE APPENDICITIS IN CHILDREN**

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**Aim of Study:** Appendicitis is the most common paediatric surgical emergency. Clinical diagnosis can be challenging owing to variability in clinical presentation. Ultrasonography (USG) is often performed as first-line imaging because of the low radiation risk. We study the diagnostic value of USG on acute appendicitis in our centre.

**Methods:** A retrospective review of paediatric patients having laparoscopic inguinal hernia repair for RIH between 1999 and 2019 was performed. Patients’ demographics, clinical presentation, operative records were analysed. The primary outcome includes operative time and second recurrence rate. The secondary outcome includes intraoperative and postoperative complications.

**Results:** During the study period, a total of 2043 hernia repairs were performed. 56 patients with 59 RIH defects were included in the study, 38 hernia defects were previously repaired laparoscopically while 21 with open method. The mean time to recurrence was 2 ± 2.6 years. Majority (71%) of the recurrence resulted from stitch related complications (e.g., loosen stitch, cut-through of purse string suture). Use of smaller non-absorbable suture was associated with a higher risk of recurrence (odds ratio 4.3636, \( P = .0017 \)). The mean operative time was 35 ± 12.6 minutes and comparable to primary repair. With a mean follow up time of 5.9 ± 4.6 years, one patient developed second recurrence 11 months after second operation. There were no other intra-operative or postoperative complications.

**Conclusions:** Laparoscopic repair is a safe and effective option for recurrent hernia in children. Preventable factors such as stitch complications, choice of sutures, were observed and should be taken care of during primary operation in order to avoid recurrence.

**P30**

**LAPAROSCOPIC REPAIR OF RECURRENT HERNIA IN PAEDIATRIC PATIENTS: TWO DECADES OF EXPERIENCE IN A TERTIARY REFERRAL CENTRE**

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**Aim:** Hernia is a common occurrence in children with recurrence occurring inevitably in both open and laparoscopic repair. The aim of this study is to report our experience of laparoscopic inguinal hernia repair in patients with recurrent inguinal hernia (RIH).

**Methods:** A retrospective review of paediatric patients having laparoscopic inguinal hernia repair for RIH between 1999 and 2019 was performed. Patients’ demographics, clinical presentation, operative records were analysed. The primary outcome includes operative time and second recurrence rate. The secondary outcome includes intraoperative and postoperative complications.

**Results:** During the study period, a total of 2043 hernia repairs were performed. 56 patients with 59 RIH defects were included in the study, 38 hernia defects were previously repaired laparoscopically while 21 with open method. The mean time to recurrence was 2 ± 2.6 years. Majority (71%) of the recurrence resulted from stitch related complications (e.g., loosen stitch, cut-through of purse string suture). Use of smaller non-absorbable suture was associated with a higher risk of recurrence (odds ratio 4.3636, \( P = .0017 \)). The mean operative time was 35 ± 12.6 minutes and comparable to primary repair. With a mean follow up time of 5.9 ± 4.6 years, one patient developed second recurrence 11 months after second operation. There were no other intra-operative or postoperative complications.

**Conclusions:** Laparoscopic repair is a safe and effective option for recurrent hernia in children. Preventable factors such as stitch complications, choice of sutures, were observed and should be taken care of during primary operation in order to avoid recurrence.

**P31**

**SPLIT SKIN GRAFTING FROM IPSILATERAL OR CONTRALATERAL THIGH IN UNILATERAL LOWER LIMB BURNS: A RETROSPECTIVE STUDY**

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Split-skin grafting is a frequently used reconstructive technique in the treatment of deep partial-thickness burns and full-thickness burns. It is common to harvest split-skin grafts (SSGs) from the thighs. However, in specific to unilateral lower limb burns, there is no universal standard for the side of donor site, ipsilateral or contralateral. The aim of this study is to evaluate the incidence of donor site wound infection in relation to the side of donor site in unilateral lower limb burns. A retrospective study was performed on all patients who have unilateral lower limb burns and received debridement and SSG at Prince of Wales Hospital between January 2011 and December 2019. Data was collected from medical records and included gender, age, types of burns, pre-morbid, total body surface area of burn (TBSA), site of burn, wound swab results, site of harvested SSG, post-operative donor site inspection date and status. 76 patients were analysed: 49 males and 27 females, with median age of 49 years old. Of the patients, 3 had flame burns, 5 had chemical burns, 17 had contact burns and 51 had scald burns. The mean TBSA is 2% (range: 0.5%-8%). 24 patients and 52 patients have SSG harvested from contralateral and ipsilateral thigh respectively. 5 patients have donor site
infection, 2 from contralateral group (8.3%) and 3 from ipsilateral group (5.8%). In unilateral lower limb burns, the choice to harvest SSG from either ipsilateral or contralateral thigh has no significant effect on the incidence of donor site wound infection.

**P32**

MULTIPLE AUTOIMMUNE DISORDERS FOLLOWING A BREAST AUGMENTATION PROCEDURE

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The purpose of this presentation is to raise awareness of the many aspects of immunological complications that could be brought about by the introduction of foreign materials containing silicon into the human body. The practice of breast augmentation using unprotected silicon materials was very common in the 1960s and 1970s and could cause problems in many systems over prolonged periods of time. We report a case of silicon injection to the breasts in 1970 followed by atypical anti-phospholipid syndrome, auto-immune thrombocytopenia purpura (which required a splenectomy), Raynaud’s phenomenon, skin and other disorders, which continued to compromise the patient’s quality of living until her death 48 years later. This case emphasized the importance of facing a complex clinical problem with a patient centered approach with due respect to past history and previous operations which may have important bearings on the present clinical picture.

**P33**

PILOT STUDY ON THE EFFECTS OF AN ORAL DOUBLE CHINESE HERB FORMULA ON EXTREMITY LYMPHOEDEMA

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Introduction: Not many therapeutic measures could yet be offered to patients suffering from lymphoedema of the extremities. Recent work implicated leukotriene B4 (LTB4) in the pathogenesis of acquired lymphoedema. Traditional Chinese Medicine (TCM) herbs have also been found to counteract fibrosis which may induce LTB4 dehydrogenase which converts LTB4 into less bioactive forms. Our hypothesis was that ingestion of a simple combination of anti fibrotic TCM herbs may improve the signs and symptoms of lymphoedematous extremities.

Methods: Two herbs (Astragulus, Peoniae rubra) were administered in a powdered form in a carefully calculated dosage 6 days a weeks for 6 months. They were monitored monthly jointly by a surgeon, TCM practitioner and TCM Research assistant for regular assessments, and side effects. Measurements included body weight, water displacement by the affected limb. Standard blood tests and LYMPQoL questionnaires were taken at baseline and 3 monthly.

Results: Body weights of patients appeared steady while two patients showed a downward trend. There was a tendency of decreasing oedema as was measured by Displaced Water Volume by 6 months. (Fig. 2 & 3) However, due to the small numbers data did not reach statistical significance. There was a significance improvement in QOL scores. The most reported improvements were reduced heaviness, congestion, discomfort and distal tingling. (Table).

Conclusions: The oral twin TCM herb formula appeared to improve symptomatology and QOL in a pilot series of patients with established extremity oedema without side effects. We are planning to explore better methods to objectively measure tissue/limb “tightness”.

**P34**

THREE-STAGE PARAMEDIAN FOREHEAD FLAP FOR RECONSTRUCTION OF FULL THICKNESS NASAL DEFECTS

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Introduction: Traditionally, the forehead flap is transferred to the nasal defect in two stages. At the first stage, the partially thinned flap is inset into the recipient site. At the second stage, the pedicle is divided. However, flap thinning is a critical issue in cases of full thickness nasal reconstruction. If completely thinned, flap necrosis commonly happens. If flap thinning is not complete, the nose appears too bulky. To overcome this problem, an intermediate extra operation was added between transfer and division stage.

Methods: Three-stage forehead flap technique was applied in 7 case of major nasal reconstruction. In the initial stage, full layered forehead flap was transposed without thinning. Cartilage grafts were placed if vascularized intranasal lining is present or restored. Lining flap was reconstructed with folded forehead skin (n = 4), turn-over flap plus septal chondromucosal pivotal flap (n = 1). At the second stage, the folded flaps were separated from the covering flaps. Excess soft tissue can be excised, cartilage grafts can be sculpted. At a third stage, the pedicle is divided.

Results: In all cases, restoration of the nasal contour is remarkably good, no flap necrosis was occurred. All patients were satisfied very well with their final aesthetic results.

Conclusions: Although adds an intermediate operation, three-stage technique ensures maximal blood supply for the lining flap and the inserted cartilage graft, provides the surgeon with options to
sculpt the cartilage support to restore an ideal tree-dimensional nasal contour in reconstruction of large full thickness nasal defects.

P35

TESTIS-SPARING SURGERY FOR BENIGN LESIONS OF TESTIS IN ADULT MEN: THE EXPERIENCE FROM A CHINESE UROLOGICAL CENTER

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Aim: To explore the clinical characteristic for benign testicular lesions in Chinese men and introduce a modified testis-sparing surgery.

Methods: From January 2011 to January 2019, we retrospectively reviewed the clinical data of 223 men with testicular lesions undergone surgery at the First Affiliated Hospital, Zhejiang University School of Medicine.

Results: According to postoperative histopathological findings, 36 cases (16.1%, 36/223) were confirmed as benign testicular lesions, 28 (12.6%, 28/223) of which were diagnosed as benign tumors, and 8 cases (3.6%, 8/223) with testicular tuberculosis. 20 (9.7% 20/206) cases with benign lesions misdiagnosed as malignancy and underwent orchiectomy. The mean tumor diameter of benign tumors was significantly smaller compared to malignant tumors (15.5 mm vs 49 mm, \( P < .01 \)). The median AFP level of benign tumors was significantly lower than that of malignant tumors (1.5 ug/L vs 3.1 ug/L, \( P < .01 \)). Younger men had a higher possibility of benign testicular tumor (25 years vs 34 years, \( P = .02 \)). Six patients with benign tumors underwent microsurgical testis-sparing operation via the scrotum approach. No complications were found postoperatively.

Conclusions: There is a higher incidence of benign testicular tumor and testicular tuberculosis is not rare in Chinese men. The tumor diameter, AFP levels, age and ultrasonography could provide indicators for benign testicular lesions. Modified testis-sparing surgery could be a safe and feasible procedure for patients with benign testicular tumor. But its advantages and indications for small malignant tumors still need further investigation.

P36

CONTEMPORARY EXPERIENCE IN MANAGEMENT OF SQUAMOUS CELL CARCINOMA OF THE PENIS IN HONG KONG: LESSONS LEARNED OVER 20 YEARS

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Aim: Optimal management of primary tumour and nodal disease remains challenging. This study aims to provide a contemporary perspective to current management of squamous cell carcinoma of the penis (SCCp) at three institutions in Hong Kong.

Methods: A retrospective analysis was conducted. Patients who received active treatment for histologically proven SCCp between January 1997 to December 2019 were identified using an institutional database (CDARS). Patient demographics, clinical features, pathological staging, treatment approach for primary tumour, nodal management, and clinical outcomes were recorded for analysis.

Results: Eighty-five patients were eligible, with a median age of 65. Mean time from development of symptoms to presentation to clinic was 9 months. In 82 patients who had surgical treatment for primary tumour, 70(85%) had partial or radical penectomy. 53(62%) patients had \( \leq T2 \) on final histopathology, potentially eligible for organ-preserving surgery. Although nodal status is the most important prognostic indicator, 42(50%) patients lacked formal histopathological nodal staging despite being within the intermediate to high risk category. Only 1 out of 8 patients who underwent prophylactic bilateral inguinal lymphadenectomy had positive nodal disease. 5-year cancer-specific survival rate was 79%.

Conclusions: SCCp patients in Hong Kong presented late and had a high mortality rate. Partial or radical penectomy were the commonest surgical options, although many appeared to be eligible for organ-preserving surgery. Many patients underwent inguinal lymphadenectomy unnecessarily. Development of a risk-adapted strategy with dynamic sentinel lymph node evaluation is needed.
A MULTI-CENTRED RETROSPECTIVE COHORT STUDY ON FACTORS AFFECTING STONE-FREE RATE FOR URETEROSCOPIC LASER LITHOTRIPSY

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Aim: The S.T.O.N.E. score was developed in 2014 for estimating stone-free rate (SFR) in individuals undergoing ureteroscopy to treat urolithiasis. The parameters of size, topography, obstruction, number and Hounsfield unit of target stones on preoperative computed tomography make up the scoring. Our study is to investigate whether the S.T.O.N.E. score or other factors play a role in SFR in our locality.

Methods: All patients who underwent ureteroscopic laser lithotripsy for urolithiasis in 2018 in United Christian Hospital and Tseung Kwan O Hospital were included. Patient demographics, relevant investigations, operative findings, reattendance details were collected. Preoperative computed tomography findings for all patients were reviewed by one investigator. Patient data was collected up to 6 months postoperatively and retrospectively analysed.

Results: 134 ureteroscopies were included in our analysis. Overall SFR was 90.3%.

The overall S.T.O.N.E. score did not correlate with SFR ($P = .75$). Those with S.T.O.N.E. score $\leq 8$ showed higher SFR approaching significance ($P = .054$). For individual parameters, SFR was significantly higher for those with lower grade obstruction ($P = .045$). SFR was higher although insignificant with smaller stone size ($P = .064$) and lower Hounsfield units ($P = .15$). Multivariable logistic regression showed that females and those presenting with no haematuria had higher SFR ($P = .035$ and $P = .049$ respectively), while higher SFR from lower stone obstruction score approached significance ($P = .052$).

Conclusions: Overall SFR was high in our study. There was no correlation between overall S.T.O.N.E. score with SFR. A larger sample size with more patients in each group may allow for better comparison.

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