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Association of Laparoscopic Surgeons of Great Britain & Ireland @ The Royal College of Surgeons of England
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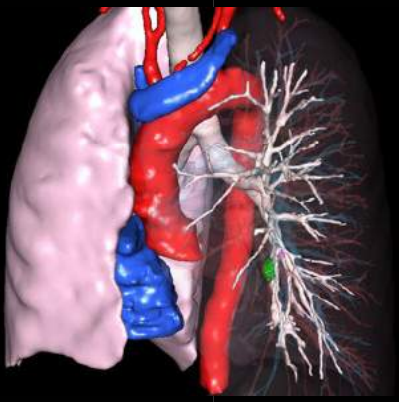

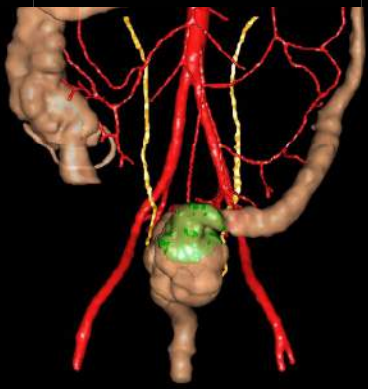

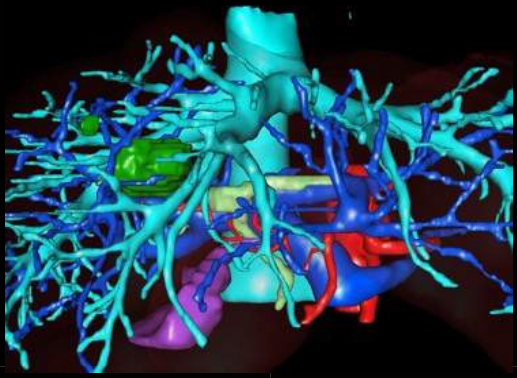

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1: Ethicon, Visible Patient Planning, 1012, v1, User Documentation, May 2020, Data on File.
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Video01 (09:15 – 09:23: 07.12.21)

ROBOTIC ANTIREFLUX SURGERY USING WITH THE LINX DEVICE

Presenter: Mr B Knight
Author(s): Mr B Knight, Mr G Van Boxel, Mr S Mercer, Mr N Carter
Institution: Portsmouth Hospitals University NHS Trust, United Kingdom

Aims: Video presentation assessing the technique and indications of robotic anti-reflux surgery with an augmented magnetic sphincter (LINX).

Methods: The case is a 46 year old gentleman with chronic reflux and a small hiatus hernia. He had normal manometry with positive pH testing and reflux on a barium swallow. The patient elected for the LINX device. Anti-reflux surgery was performed with a 3 port Robotic technique on a DiVinciX.

Results: Hiatal cruroplasty and implantation of the LINX device was successfully performed robotically. Operative time was 35 minutes and performed as day surgery.

Conclusion: The video highlights the benefits of articulating instruments and enhanced magnification when placing the device. The robotic platform offers advantages in identification and dissection of the posterior vagus nerve and a potentially shorter operative time.

Key statement: Video presentation highlighting the technique and advantages of using the robotic platform to implant a magnetic sphincter augmentation device.

Video02 (09:23 – 09:31: 07.12.21)

A LAPAROSCOPIC TECHNIQUE TO PREVENT THE FORMATION OF PARASTOMAL HERNIAS BY CREATING AN EXTRAPERITONEAL TUNNEL TO DELIVER THE STOMA

Presenter: Mr J Montiero de Barros
Author(s): Mr J Monteiro de Barros, Mr TK Rajesh
Institution: Derriford Hospital, Plymouth, United Kingdom

Aims: Parastomal herniation is a common complication for patients having end colostomies. It is proposed that the laparoscopic creation of an extraperitoneal anatomical plane for the transition of the stoma through the abdominal wall reduces herniation rates.

Methods: The key steps in the procedure are meticulous dissection of the vessels, use of indocyanine green to check vascularity, not extracting specimens via the stoma site, and creation of a 5cm extraperitoneal tunnel. There is no use of mesh or additional equipment to perform this technique.

Results: We present the case of a 58 year old female having a colostomy created as part of a laparoscopic abdomino-perineal resection. There have been no CT confirmed or clinically detected parastomal hernias at the 1 year follow up in a pilot study. There have been no complications.

Conclusion: Due to the high morbidity of parastomal hernias, prophylactic techniques should be considered when creating end colostomies & ileostomies. By not using mesh, this technique does not have additional complications compared to standard stoma formation.

Key statement: ACGBI has identified that the treatment and prevention of parastomal hernias as being a high priority in colorectal surgery. We propose that the technique shown in the video is a safe and effective method reducing the rates of parastomal formation.

Video03 (09:31 – 09:39: 07.12.21)

ROBOTIC CARDIAPLASTY FOR END STAGE ACHALASIA

Presenter: Mr B Knight
Author(s): Mr B Knight, Mr G Van Boxel, Mr S Mercer, Mr N Carter
Institution: Portsmouth Hospitals University NHS Trust, United Kingdom

Aims: To assess the technique and benefits of using the robotic platform to perform a cardiaplasty for end stage achalasia.

Methods: This video shows the technique adopted to perform a robotic cardiaplasty for end stage achalasia. The patient is a 38 year old gentleman with type II achalasia. A POEMS procedure had been performed 18 months prior with limited success due to the sigmoid nature of the esophagus.

Results: Successful robotic procedure cardiaplasty was performed. The operative time was 95 minutes. Length of stay was 36 hours. Clinical improvement in dysphagia was noted once normal diet resumed.

Conclusion: The video demonstrates the benefits of da Vinci Xi robotic platform. The enhanced magnification and articulating instruments allowed for safer dissection of a scarred hiatus and better visualization when performing the stapled cardiaplasty.

Key statement: Video exposing the operative technique and advantages of robotic cardiaplasty for end stage achalasia.

Video04 (09:39 – 09:47: 07.12.21)

ROBOTIC GASTRIC BYPASS FOR MORBID OBESITY AFTER FAILED GASTRIC BAND

Presenter: Mr B Knight
Author(s): Mr B Knight, Mr G Van Boxel, Mr S Mercer, Mr N Carter
Institution: Portsmouth Hospitals University NHS Trust, United Kingdom

Aims: To assess and highlight the technique for robotic Roux en-y-gastric bypass after a previous gastric band.

Methods: This video highlights the technique and benefits of robotic gastric bypass for morbid obesity. The patient had a BMI of 44 and had had a previous explanted gastric band with due to a severe band slip.

Results: Conversion to Roux en y bypass using da Vinci Xi. The omega loop technique was adopted for this case with a BP limb of 100cm and Alimentary limb of 80cm. The procedure took 120 minutes with a 48hour hospital stay. There were no complications.

Conclusion: The video highlights the advantages or robotic platform and of the Xi system. The Xi enables omega loop and standard roux construction techniques; permits better access for bougie placement, improved ergonomics for the surgeon and allows easier hand sewn anastomoses and closure of mesenteric defects.

Key statement: Video exposing technique and benefits of robotic RYGB after previous gastric band.

Video05 (09:47 – 09:55: 07.12.21)

MULTI-MODAL APPROACH WITH FLUORESCENCE IMAGING, LAPAROSCOPIC ULTRASOUND AND LASER LITHOTRIPSY IN THE LAPAROSCOPIC MANAGEMENT OF COMPLEX LARGE BILE DUCT STONES

Presenter: **Dr N Bandlamudi**
Author(s): **Dr N Bandlamudi, Mr I Bhatti, Mr A Awan**
Institution: **Royal Derby Hospital, United Kingdom**

Aims: The optimal management of complex common bile duct stones (CBDS) is still under debate and therapeutic approaches vary widely. Here we describe role of multi-modal approach in laparoscopic management of complex large CBDS with enhanced visualisation to improve safety and advanced lithotripsy techniques with favourable outcomes.

Methods: A 61-year old male was found to have two large CBDS, deemed unsafe for retrieval at Endoscopic retrograde cholangiopancreatography (ERCP). A laparoscopic CBD exploration and concomitant subtotal cholecystectomy was performed with utilisation of laparoscopic ultrasound (LUS), Indocyanine green (ICG) and laser lithotripsy.

Results: The patient underwent expedited laparoscopic biliary surgery. The approach involved use of ICG to delineate bile duct and hepatic artery, and LUS to visualise cystic duct, bile duct and hepatic artery. Laser lithotripsy was utilised to fragment two large, impacted stones. A primary closure of CBD was performed.

Conclusion: This case demonstrates applicability of multi-modal imaging and laser lithotripsy for management of large, complex CBDS. Advanced laparoscopic skills and training is instrumental in attaining successful outcomes.

Key statement: Laparoscopic management of complex CBD stones is challenging. Despite advances in endoscopic interventions, role of surgery is irrefutable and requires an intraoperative multi-modal approach to undertake safe laparoscopic CBD exploration. We suggest development of safe CBD exploration guidelines analogous to cholecystectomy.

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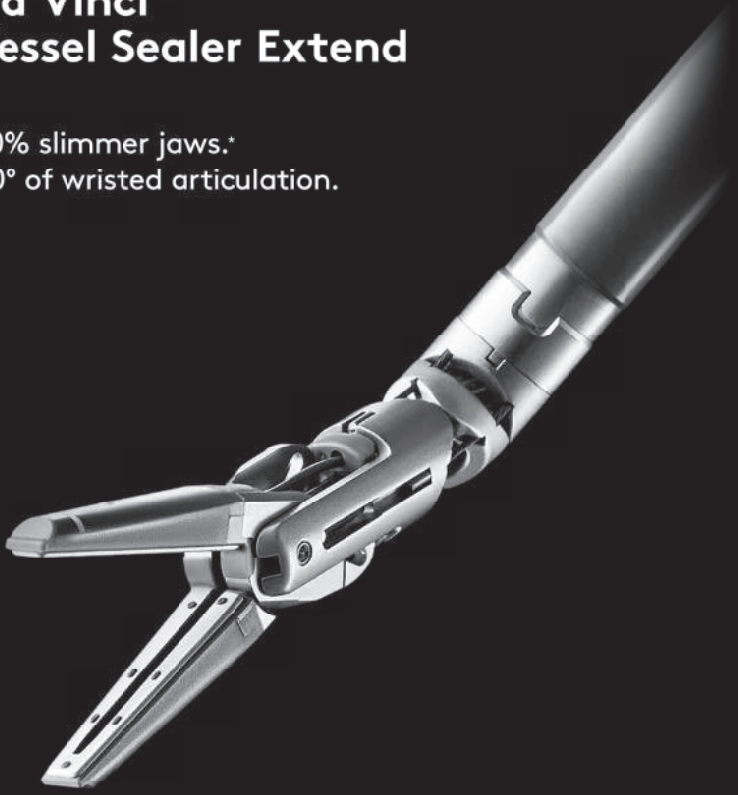

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FP01 (14:25–14:35: 07.12.21)

DEDICATED WEEKEND OPERATING LISTS FOR LAPAROSCOPIC CHOLECYSTECTOMIES: AN INTENSIVE APPROACH TO AID COVID-19 RECOVERY AND REDUCE WAITING LISTS

Presenter: Mr K Rajput
Author(s): Mr K Rajput, Ms R Clifford, Dr C Yanna, Ms KA Macdonald, Mr A Kaul
Institution: St Helens and Knowsley Trust, Whiston, United Kingdom

Aims: To analyse the role of intensive dedicated operating lists to reduce cholecystectomy waiting-lists in a single Trust as a mode of COVID-19 recovery.

Methods: Carefully screened patients were listed for surgery across two weekends in October 2020 and May 2021. Prospective data was collected to measure patient related outcomes and the financial impact, with 30-day telephone follow up.

Results: Among the 48 cases, most common primary indication was biliary colic (57.1%). Over ninety-percent of cases were completed laparoscopically. 81.3% were completed as a day-case. 30-day complication rate was 9.6%, with a 0% mortality rate. 30-day COVID-19 rate was 14.3% and 0%. The overall net-profit gained was £29,311.77 and £28,021.59.

Conclusion: The effect of COVID-19 upon elective waiting-lists, and recurrent emergency admissions, is well established. With intensive focused operating lists and careful cohort selection there is avoidance of increased burden on emergency services. There is also significantly increased theatre efficiency leading to a financial gain.

Key statement: With the utilisation of a cohesive multidisciplinary team, careful patient selection and clinician compliance; our trust continues to develop an efficient platform in tackling the elective waiting-lists.

FP02 (14:35–14:45: 07.12.21)

LAPAROSCOPY IN EMERGENCY COLORECTAL SURGERY: A 7-YEAR PROSPECTIVE SINGLE CENTRE COHORT STUDY

Presenter: Mr A Darbyshire
Author(s): Mr A Darbyshire, Ms R Smythe, Mr J Richardson, Professor J Khan, Mr S Mercer
Institution: Portsmouth Hospitals University NHS Trust, United Kingdom

Aims: Colonic diseases requiring urgent resection are a mainstay of emergency intestinal surgery. Laparoscopy is being increasingly used for emergency surgery, but its role is still being defined. This study describes our centre's experience of adopting a laparoscopic approach for emergency colorectal resection.

Methods: A retrospective single centre cohort study was performed using NELA data from 01/01/2014-31/12/2020. All patients who had a colorectal resection were included. Patient demographic, operative and in-hospital outcomes were compared for resection type and operative approach. Logistic and linear regression were performed for 30-day mortality and post-operative length of stay.

Results: Of 507 cases, 48.1% were started laparoscopically and 27.6% successfully completed. Colorectal specialists were more likely to start/complete cases laparoscopically. Patients suitable for laparoscopy were younger, with lower ASA grade and P-POSSUM mortality, and had significantly lower post-operative length of stay and 30-day mortality than open surgery.

Conclusion: Laparoscopy has been sustainably adopted for emergency colorectal resections in our centre, for a selected group of patients. Most laparoscopic resections were performed by a colorectal surgeon, supporting the role of subspecialty delivered emergency surgery.

Key statement: Attempted laparoscopy rates increased over the study period and were >50% for the last 4 years. Colorectal specialists were more likely to start and complete cases laparoscopically (82.4% and 91.4% vs 60.3% for open). Cases completed laparoscopically had a 30-day mortality comparable to elective surgery (2.1%).

FP03 (14:45–14:55: 07.12.21)

SPECIALIST-LED URGENT LAPAROSCOPIC CHOLECYSTECTOMY - THE NEW GOLD STANDARD

Presenter: Mr A Botros
Author(s): Mr S Mercer, Mr M Glaysher
Institution: Portsmouth Hospitals University NHS Trust, United Kingdom

Aims: Despite overwhelming evidence of the clinical and financial benefits of urgent cholecystectomy, there is variable enthusiasm and uptake across the UK. In 2014, following the NELA organisational audit, we implemented a specialist GI surgeon-led emergency surgery service; all gallstone-related admissions come under the direct care of specialist upper GI surgeons.

Methods: We analysed the results of implementing a 7-day model of urgent cholecystectomy delivered by specialist upper GI surgeons. Computerised operating theatre records were interrogated to identify all patients within a 5-year period undergoing cholecystectomy. Patient demographics, admission details, length of stay, duration of surgery, and complications were analysed.

Results: From 2016-2020, some 4870 cholecystectomies were performed; 1793 (36.8%) urgent and 3077 (63.2%) elective. All cases were started laparoscopically; 25 (0.5%) converted to open – 14 (0.78%) emergency and 11 (0.36%) elective. Urgent cholecystectomy took about 20 minutes longer (median 74 versus 52 minutes); median total hospital stay was 4 days.

Conclusion: Urgent laparoscopic cholecystectomy is safe and feasible in most patients with acute gall bladder disease. Surgery under the direct care of upper GI specialist surgeons is associated with a low conversion rate, low complication rate and short hospital stay. Urgent laparoscopic cholecystectomy should be recognised as gold standard treatment.

Key statement: Despite 20 years of accumulating evidence, urgent cholecystectomy for gallstone-related emergency hospital admissions is still not widespread. This study describes the outcomes in a busy DGH with a specialist upper GI surgeon-led urgent cholecystectomy service. Conversion rate is less than 1%, and total length of stay is 4 days.

FP04 (14:55–15:05: 07.12.21)

OUTCOMES OF EMERGENCY LAPAROSCOPIC SURGERY IN THE ELDERLY

Presenter: Mr S Mercer
Author(s): Mr S Mercer, Miss S Body, Mr B Knight
Institution: Portsmouth Hospitals University NHS Trust, United Kingdom

Aims: Patients undergoing emergency laparotomy have high morbidity and mortality rates. One-third of patients requiring emergency surgery are over 75 years old, and their in-hospital mortality exceeds 17%. Fewer than 20% of emergency abdominal operations in the UK are attempted laparoscopically. We investigated whether laparoscopic surgery in the elderly affected outcomes.

Methods: An observational UK study was performed using the prospectively maintained National Emergency Laparotomy Audit database. Operative approach, NELA risk-prediction score and in-hospital mortality were recorded. The effect of operative approach on in-hospital mortality was analysed, both on a national basis and at our high-volume laparoscopic centre.

Results: 47667 patients were included in the study; 15068 were over 75 years old. Nationally, surgery was completed laparoscopically in 7.8% of elderly patients; crude (9.2%) and risk-adjusted (7.1%) mortality were significantly reduced. Locally, surgery was laparoscopic in 48.4% of patients; crude mortality (6.6%) and risk-adjusted (3.3%) mortality were significantly reduced.

Conclusion: The laparoscopic approach to emergency surgery in the elderly significantly reduces in-hospital mortality. Emergency laparoscopic surgery should be embraced in every hospital dealing with emergency abdominal surgery.

Key statement: One-third of patients needing emergency abdominal surgery are over 75 years old; their in-hospital mortality is 17%. This study uses data from NELA to show that the laparoscopic approach to emergency surgery in the elderly is safe, feasible, and associated with a clinically significant reduction in mortality.

FP05 (16:05–16:15: 07.12.21)

IMPROVING ENVIRONMENTAL PERFORMANCE OF LAPAROSCOPIC SURGERY

Presenter: Ms H Hidayat
Author(s): Ms H Hidayat, Mr EX Ngeyu, Ms A Brown, Mr A Gilliam
Institution: Darlington Memorial Hospital, United Kingdom

Aims: Operating theatres are a significant contributor of clinical waste in hospitals. Given the declaration of climate change as a global emergency, it is paramount that the environmental impact of surgical procedures is reduced. Laparoscopic access being the surgical treatment of choice nowadays should therefore adopt environmentally friendly approaches to procedures.

Methods: The patient journey through a surgical procedure was examined for laparoscopic cholecystectomy in theatres. This included inspection of current cholecystectomy kit and replacement of disposable instruments with reusable equivalents. Subsequent analysis of the weight differences between the two kits were carried out alongside a cost-benefit analysis of the implemented changes.

Results: An 82% reduction in plastic waste per procedure (558g/procedure) was achieved using resposable instruments. The carbon footprint of a resposable versus standard set was 177kg Vs.1014kg of CO2 emissions/500 procedures. A cost saving of £80,650 per 500 cases translated into 58% cost reduction with further £641.7 saving with waste disposal using resposable instruments.

Conclusion: The significant reduction in carbon footprint and the meaningful cost savings by avoiding use of fully disposable instruments and replacing them with re-usable/semi-reusable ones makes their use in laparoscopic surgery a cost-effective and greener option.

Key statement: Environmentally friendly changes can be made to patient journey with establishment of integrated clinic visits, teleconsultations, and reducing demand for surgical management. These changes, in conjunction with tangible reductions in carbon emissions with use of resposable equipment, is an example of an exciting first step towards a greener, more sustainable future in surgery.

FP06 (16:15–16:25: 07.12.21)

LEVERAGING ACCESS TO TECHNOLOGY AND ENHANCED SURGICAL TECHNIQUE (LATEST) IN LAPAROSCOPIC BILE DUCT EXPLORATION (LBDE)

Presenter: Mr L Navaratne
Author(s): Mr L Navaratne, Mr J Al-Musawi, Mr A Isla
Institution: Northwick Park & St Mark's Hospitals, London North West University Healthcare NHS Trust, United Kingdom

Aims: LBDE is emerging as the modality of choice for managing choledocholithiasis. Transcystic stone clearance is associated with reduced post-operative morbidity, cost and length of hospital stay. We report our experience of Leveraging Access to Technology and Enhanced Surgical Technique (LATEST) in LBDE to achieve higher rates of transcystic stone clearance.

Methods: A review of a prospectively collected database of 481 consecutive patients who underwent LBDE (1998-2021) was performed. Patients were classified as Group-1 (pre-LATEST era): 1998-2014 and Group-2 (LATEST era): 2014-2021. The LATEST era included leveraging access to technologies (ultra-thin choledochoscopes and lithotripsy techniques) and enhanced surgical techniques.

Results: The transcystic approach was achieved in 210 (86.1%) patients in Group-2 compared to 26 (11.0%) patients in Group-1 ($p<0.0001$). Stone clearance was significantly higher in Group-2 ($p=0.0034$). Minor (Clavien–Dindo I–II) and major (Clavien–Dindo III–IV) post-operative complications were significantly lower in Group-2 ($p=0.0045$ and 0.0262 respectively).

Conclusion: Leveraging access to technologies such as ultra-thin choledochoscopes (3mm) and Lithotripsy-Assisted Bile duct Exploration by Laparoendoscopy (LABEL), whilst adhering to enhanced surgical techniques, resulted in achieving higher rates of transcystic LBDE. This was associated with significantly increased stone clearance rates, reduced post-operative morbidity and shorter hospital stay.

Key statement: Leveraging Access to Technology and Enhanced Surgical Technique (LATEST) includes the use of ultra-thin choledochoscopes, lithotripsy techniques (LABEL) and correction of the cystic-choledochal angle for easier transcystic access. Adherence to the LATEST principles result in higher rates of transcystic stone clearance and better outcomes following laparoscopic bile duct exploration.

FP07 (16:25–16:35: 07.12.21)

SINGLE INSTITUTE EXPERIENCE ON ROBOTIC VS LAPAROSCOPIC VS OPEN APPROACH TO ABDOMINOPERINEAL EXCISION OF RECTUM AND ANUS

Presenter: Mr M Mathur
Author(s): Mr M Mathur, Mr C Selvasekar
Institution: The Christie NHS Foundation Trust, Manchester, United Kingdom

Aims: Low rectal cancer surgery is a challenge because of the complex anatomy of the pelvis. Lot of questions arise regarding approach to APR which is standard for locally advanced rectal cancers. I am presenting 10 years' experience of Robotic Vs Laparoscopic Vs Open approach to Abdominoperineal resection.

Methods: All the patients who underwent APR for a primary rectal cancer from February 2012 till February 2021 were enrolled in this retrospective study. The data was analysed under different headings like Hospital stay, Pathological outcome, morbidity, reoperation and morbidity within 30 days of primary surgery.

Results: In total 147 APER took place 41 Robotically, 30 by Laparoscopic and 76 by Open technique.

	Robotic	Laparoscopic	Open
Hospital Stay	7(+/-2)	8(+/-2)	15(+/-5)
R1 Resection	2%	0%	5.2%
Morbidity	37.2%	27%	48.6%
Re-Operation	0%	0%	3.9%
Mortality	0%	0%	1.3%

Conclusion: Robotic and Laparoscopic Approach for Abdominoperineal resection for primary rectal cancer decreases the risk of morbidity and hospital stay for the patients as compared to Open technique.

Key statement: Multicentre RCT is needed to compare outcomes of Robotic and Laparoscopic Approach as they both seem to be comparable groups. In Robotic surgery cost is to benefit ratio is a question. Long term follow is needed to look for Urological and sexual disfunctions which may be present in Laparoscopic group.

FP08 (16:35–16:45: 07.12.21)

AN INTERNATIONAL CORE OUTCOME SET FOR EVALUATING ROBOTIC ASSISTED SURGERY INCLUDING PATIENT, SURGEON, ORGANISATIONAL AND POPULATION IMPACTS (THE RoboCOS STUDY)

Presenter: Dr S Shaikh
Author(s): Dr S Shaikh[1,2], Dr C Robertson[2], Dr K Gillies[2], Professor M Campbell[2], The RoboCOS Study Group[2]
Institution: [1]Abderdeen Royal Infirmary, United Kingdom, [2]University of Aberdeen, United Kingdom

Aims: The introduction of robot-assisted surgery (RAS) is costly requiring whole system transformation making assessment of benefits/disbenefits complex. There are no agreed outcomes to measure this. The RoboCOS study aimed to develop a core outcome set for the evaluation of RAS accounting for its impact on the whole system.

Methods: Identification of a long-list of potentially relevant outcomes through systematic review of trials /health technology assessments; interviews with individuals from a range of stakeholder groups (surgeons, service managers, policy-makers and evaluators) and a focus group with patients and public; prioritisation of outcomes via 2-round online international Delphi survey; consensus meeting.

Results: 721 outcomes were conceptualised into 83 outcome-domains for inclusion in the Delphi survey. A 10-item core-outcome-set was agreed at the consensus meeting including outcomes at: patient-level (treatment-effectiveness; overall QoL; disease-specific QoL; complications); surgeon-level (precision/accuracy; visualisation); organisation-level (equipment failure; operative quality standardisation; cost-effectiveness); population-level (equity of access).

Conclusion: The RoboCOS core outcome set, which includes the outcomes of importance to all stakeholders, is recommended for use in all future evaluations of robot-assisted surgery to ensure relevant and comparable reporting of outcomes.

Key statement: The RoboCOS core outcome set is the first of its kind - an international minimum outcome set for use with multiple stakeholders involved in RAS implementation and evaluation. It is relevant for the evaluation for existing and emerging robotic technology as well as comparison across different platforms.

TP 69 1.0 03/2021/A-E

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P01

DIAGNOSIS OF ACUTE DIVERTICULITIS: A RE-AUDIT

Presenter: Mr A Ammar
Author(s): Mr A Ammar, Dr D Goh, Mr M Mohsin
Institution: The Mid Yorkshire Hospitals NHS Trust, Wakefield, United Kingdom

Aims: Determine our compliance with NICE guidelines for diagnosis of acute diverticulitis as regards to offering FBC, U&E and CRP tests for all patients with suspected acute complicated diverticulitis. Those with raised inflammatory markers should be offered a contrast CT scan within 24 hours of hospital admission.

Methods: Retrospective data collection between October and December 2020 for adult patients presenting with acute diverticulitis at the Mid Yorkshire Hospitals NHS trust. Data was compared to a previous audit in the trust done in 2019.

Results: Full compliance with FBC and U&E with an improved compliance in offering CRP (85% compared to 76% in 2019).However the percentage of CT scans done in the 1st 24 hours has slightly dropped to 73% as opposed to 76% in 2019.

Conclusion: Although all patients with raised inflammatory markers eventually had a CT scan, almost three quarters of patients had their scan done within the 1st 24 hours of presentation while the rest of the patients experienced some delays that reached up to 72 hours from presentation.

Key statement: The NICE guidelines for Diverticular Disease are key for early diagnosis and management of suspected complicated acute diverticulitis. This can be achieved by ensuring bloods are taken upon presentation to acute services as well as prompt discussion with the on-call radiologist for a contrast CT if required.

P02

ROLE OF PROPHYLACTIC CHOLECYSTECTOMY FOR PATIENT UNDERGOING LAPAROSCOPIC ROUX-EN-Y GASTRIC BYPASS (LRYGB) FOR WEIGHT LOSS: A SYSTEMATIC REVIEW AND META-ANALYSIS

Presenter: Ms S Virupaksha
Author(s): Ms S Virupaksha[1,2], Mr M Bhandari[1], Mr SV Thulasiraman[3], Professor Y Viswanath[3], Mr G Bussa[1]
Institution: [1]North Tees University Hospital, Stockton, United Kingdom
[2]Teesside University, Middlesbrough, United Kingdom
[3]James Cook University Hospital, Middlesbrough, United Kingdom

Aims: Weight loss is associated with a fivefold increase in gallstone formation and management of common bile duct stones by conventional endoscopic is challenging after LRYGB. The primary aim of this systematic review and meta-analysis is to evaluate the role of prophylactic cholecystectomy in these patients with gall bladder pathology.

Methods: Studies were searched and selected based on predefined inclusion and exclusion criteria from database & manual search. The published articles in Medline, Embase, Cochrane central database and PubMed central between January 1997 & December 2020 included. Data analyzed using Newcastle Ottawa score for quality and Revman software for the meta-analysis.

Results: Ten observational studies with 5658 patients were appraised. Cholecystectomy was performed in 27.14% of cases. Of these 13.15% underwent cholecystectomy before and 8.89% had concomitant with LRYGB. Newly detected gallbladder pathology on ultrasound scan were 9.09% post LRYGB & 18.63% remained asymptomatic and only 5.11% required cholecystectomy.

Conclusion: There is no substantial evidence to support prophylactic cholecystectomy in patients undergoing laparoscopic Roux-en-Y gastric bypass (LRYGB) for weight loss. Structured and well-powered RCTs need to be supposed to provide quality evidence.

Key statement: This systematic review & meta-analysis has failed to establish a role for prophylactic cholecystectomy in patients undergoing LRYGB. Secondly, there is no role for routine ultrasound screening prior to LRYGB for gallbladder pathology. Concomitant cholecystectomy can be recommended at the discretion of the operating surgeons in cases of symptomatic gallbladder pathology.

P03

A UNIVERSITY HOSPITAL'S EXPERIENCE IN EMERGENCY LAPAROSCOPIC HARTMANN'S PROCEDURE

Presenter: Dr S Osifo
Author(s): Miss J Ma, Mr C Swaminthathan, Dr S Osifo, Ms H Barrett
Institution: Royal Sussex County Hospital, Brighton, United Kingdom

Aims: Hartmann's is a potentially lifesaving emergency surgery, commonly performed as an open procedure. Recovery from emergency laparotomy can be slow and thwart with complications, and can put strain on hospital resources. The study explored emergency patient outcome in a university hospital using laparoscopic approach compared to open approach.

Methods: Consecutive patients who underwent laparoscopic Hartmann's (LH) or open Hartmann's between 2015 and 2021 by a general surgeon were included. A retrospective inspection of electronic patient notes and NELA data was done to collect patient demographics, pre-operative and post-operative data.

Results: 22 patients underwent LH and 25 had OH. Predicted-NELA-morality in LH was 9.3% compared to 19.9% in OH. One LH patient had blood loss >1L compared to four in OH. The average post-operative hospital stay was 13 days after LH and 25 after OH. Two 30-day-mortality was noted post LH.

Conclusion: In carefully selected cases, LH appears safe and can achieve satisfactory patient outcome. Patient's pre-operative physiology appeared to be a main determining factor in whether laparoscopic approach is suitable.

Key statement: Laparoscopic Hartmann's can be a safe alternative method in managing acute left sided colonic pathology in carefully selected patient cohort e.g. Low predicted NELA score. Patients who have LH may benefit from reduced hospital stay, and possibly from lesser blood loss, reduced respiratory problem, and development of intra-abdominal collection.

P04

ADVANCED LAPAROSCOPIC APPROACH IN EMERGENCY ABDOMINAL SURGERY: SINGLE-CENTRE ANALYSIS OF 226 CONSECUTIVE CASES

Presenter: Dr J Latif
Author(s): Dr J Latif, Miss C Hope, Mr I Bhatti, Mr A Awan
Institution: University Hospitals of Derby & Burton, Derby, United Kingdom

Aims: The benefits of a minimally invasive approach over open are well established. However, there is limited utilisation of laparoscopy in emergency general surgery (EGS). This study reports outcomes from the use of advanced laparoscopy in EGS from a single high-volume UK teaching hospital over an 11-year period.

Methods: A retrospective analysis of prospectively collected data of patients that underwent laparoscopy in EGS with acute abdominal pathology from 2010 – 2021 was performed. Patient demographics, procedural and post-operative data was collected. Statistical analysis was performed using STATA 16© software. A p value <0.05 was deemed statistically significant.

Results: 226 consecutive patients were included in the study. Across all patients, median (IQR) Charlson Co-Morbidity Index (CCI) was 2 (0 – 4), NELA mortality (%) was 0.3 (0.1 – 1.1) and P-POSSUM morbidity (%) was 8.4 (4.3 – 32.1). Median (IQR) length of stay after operation was 4 (2 – 7) days for all patients.

Conclusion: The use of a minimally invasive approach further reduces the burden of intervention on already physiologically deplete patients. This study reports satisfactory outcomes from a high-volume UK centre, including those cases which require advanced laparoscopic skills such as pancreatico-biliary, bariatric and oesophago-gastric emergencies.

Key statement: The use of laparoscopy is a safe and feasible alternative to laparotomy in EGS for a select group of patients. In cases requiring advanced laparoscopic skills, training and relevant subspecialist experience is critical to optimise patient outcomes. Trainee surgeons should be encourage to utilise laparoscopy in EGS for select patients.

P05

LAPAROSCOPIC MINI GASTRIC BYPASS VS LAPAROSCOPIC ROUX-EN-Y GASTRIC BYPASS: A SYSTEMATIC REVIEW AND META-ANALYSIS

Presenter: Mr M Bhandari
Author(s): Mr M Bhandari[1,2], Ms S Virupaksha[1], Mr M Rao[1], Mr G Bussa[1], Professor YKS Viswanath[3,2]
Institution: [1]North Tees University Hospital, Stockton, United Kingdom
[2]Teesside University, Middlesbrough, United Kingdom
[3]James Cook University Hospital, Middlesbrough, United Kingdom

Aims: The aim of this study was to identify benefits in performing Laparoscopic Mini Gastric bypass for morbid obesity in contrast to Roux-en-Y gastric bypass. We evaluated two different variables of interest, remission of Diabetes Melllitus and Weight loss.

Methods: A systematic literature search was performed in Pubmed, Embase, Cochrane library. For assessment of quality, NOS (Newcastle-Ottawa Scale) and for assessing the risk of bias Cochrane Collaboration's tool were used applicably. The meta-analysis was performed by RevMan 5.3 software and following PICO format, we chose 6 cohort studies and 4 RCT's.

Results: A total of 1792 patients were included in 10 studies (6 cohorts & 4 RCT's). Patients receiving mini-gastric bypass faired better in contrast with patients receiving Roux-en-Y gastric bypass; especially with a higher 1-year Estimated Weight Loss [EWL%] ($P < 0.05$), and higher type 2 diabetes mellitus remission rate ($P<0.05$).

Conclusion: Mini gastric bypass proves to have an advantage over Roux-en-Y gastric bypass in terms of diabetes remission and weight loss in short term. Larger sample size, long-term follow-up and multi-centre randomized control trials are needed to compare the effectiveness and safety between mini-gastric bypass and Roux-en-Y gastric bypass.

Key statement: The advent of laparoscopic anti-obesity surgery has increased its safety, efficacy and demand from the population aside development of new techniques. This meta-analysis appraised two such techniques, has shown Mini gastric bypass have an advantage over Roux-en-Y gastric bypass in terms of diabetes remission and weight loss in short term.

P06

MANAGEMENT OF ANASTOMOTIC LEAKS AFTER ELECTIVE COLORECTAL RESECTIONS: THE EAST OF ENGLAND EXPERIENCE

Presenter: Mr M Aker
Author(s): Mr M Aker
Institution: STEER Collaborative, Cambridge, United Kingdom

Aims: The aim of this multi-centre study is to explore the different management strategies utilised in managing right, left, and extra-peritoneal anastomotic leaks (AL), including different surgical options, and analyse rates, outcomes, and patterns of failure of initial management.

Methods: All consecutive patients who had a confirmed AL after elective colorectal resections from 1st January 2014 to 31st December 2019 were included at seven hospitals across the East of England. Morbidity (length of stay, failure rates) and mortality were compared across the different management strategies, and survival analyses were performed.

Results: 201 (5.9%) patients with confirmed AL were included. The initial treatment was conservative in 102 patients (50.7%), Radiological in 19 (9.5%), surgical in 80 (39.8%). Of 121 patients who were initially treated non-operatively, 10% eventually needed laparotomy. Patients with a defunctioning stoma are more likely to have successful conservative management.

Conclusion: AL carry a significant mortality of up to 25% in 2 years. Despite initial conservative, antibiotic and radiological intervention being successful in the majority of patients, two out of five patients will still require a laparotomy and over a quarter of patients will have an end stoma.

Key statement: There were no significant differences in mortality or long-terms survival between the different initial treatment modalities. Selecting the correct management for the correct patient is key. Treatment should primarily be

P07

COLORECTAL CANCER REFERRAL PATHWAY DISRUPTIONS AS A RESULT OF COVID-19

Presenter: Dr L Spyropoulou
Author(s): Dr L Spyropoulou, Dr D Curley, Dr M Li, Mr G Wynn, Mr T Doulias
Institution: East Suffolk and North Essex Foundation Trust, Colchester, United Kingdom

Aims: COVID-19 has impacted diagnosis and treatment of colorectal cancer. Lockdown measures, overburdened healthcare services and minimal patient contact altered referral pathways, generating a potential risk to patients. We aimed to identify the pandemic effect on colorectal referral pathways.

Methods: All Lower GI 2 Week Wait (2WW) referrals during March-June 2020 were reviewed, obtaining information on the timeline of investigation and treatment. The data was compared to evidence from the same referral period in 2019.

Results: Referrals reduced by 34%. More patients were reviewed virtually (76.2%) and received CT (35.8%) initial investigation. 114(17.1%) patients were not investigated, primarily due to COVID-19(35.1%). Of 44 new diagnoses, 14(31.8%) breached investigation and 20(45.5%) treatment date, with 1 emergency admission. There was 61.7% less operative activity.

Conclusion: COVID-19 has changed surgical practice, forcing alternative clinic, investigation and treatment options. Disruption of colorectal pathways resulted in reduced referrals, investigation delays and less surgical activity.

Key statement: Patients not investigated through the 2WW pathway are at risk of delayed presentation with advanced disease that may deprive the opportunity of curative treatment. We recommend a five-year follow-up of incomplete referrals occurring during the pandemic, in order to identify missed positive diagnoses.

P08

COVID-19 PANDEMIC HAS SIGNIFICANTLY INFLUENCED THE PATHWAY OF THE MANAGEMENT OF ACUTE APPENDICITIS. AN EXPERIENCE FROM A TERTIARY CARE CENTRE

Presenter: Mr M Mohamed
Author(s): Mr M Mohamed, Mr A Malik, Mr M Sajid, Professor M Khan, Mr C Swaminathan
Institution: Royal Sussex University Hospital, Brighton, United Kingdom

Aims: Acute appendicitis (AA) is still conventionally being treated by appendicectomy despite several RCTs and meta-analyses endorsing the significantly higher resolution rate on conservative management with antibiotic. The objective of this study is to check whether the COVID-19 pandemic lockdown resulted in any change in the conventional practice to treat AA.

Methods: Data of all patients presenting with acute appendicitis on clinical, biochemical, haematological and radiological grounds was collected prospectively. For comparison purpose, retrospective cohort of patients treated for acute appendicitis in same number of days was used.

Results: 39 patients had management of acute appendicitis during study period and retrospective cohort consisted of 58 patients presenting with AA. Appendicectomy rate dropped from 94.82% to 43.58%. Conservative management was successful in >51 % and rate of antibiotics therapy increased from 5.13% to 51.28%. 5 patients failed antibiotics therapy which underwent appendicectomy.

Conclusion: The COVID-19 pandemic has significantly influenced the management pathway of AA favouring more liberal approach of using antibiotics therapy. The COVID-19 pandemic seems to have powerful influence on this change in the practice instead of previously existing evidence based upon several randomised, controlled trials and meta-analysis.

Key statement: Study Design: Prospective Cohort Study.

P09

LAPAROSCOPIC CHOLECYSTECTOMY FOR MILD ACUTE GALLSTONE PANCREATITIS INDICATION ITSELF IS A GOOD PREDICTOR OF (MINIMAL) INTRAOPERATIVE DIFFICULTY

Presenter: Ms G Bennett
Author(s): Mr I Maitra, Ms G Bennett, Mr R Date
Institution: Lancashire Teaching Hospitals, Preston, United Kingdom

Aims: The literature predicting difficulties during Laparoscopic Cholecystectomy (LC) for Acute Gallstone Pancreatitis (AGP) is mainly focused on timing of operation. LC for AGP is rarely difficult irrespective of the timing of operation. The aim of this study is to assess intraoperative difficulties in mild AGP patients to verify this observation.

Methods: Single centre retrospective analysis of all patients who underwent LC for mil AGP between 2014-2018. Patients with known alcohol abuse, post ERCP induced pancreatitis, and chronic pancreatitis were excluded. Univariate weighted analysis was performed with 11 factors, a linear threshold boundary defined as the mean distance between the 4 DoD.

Results: Ninety-six patients. Majority of patients were an ASA 2 with median BMI 28 (highest 50). Five procedures were technically difficult (DoD >3), only one procedure was converted to open. Univariate analysis showed duration of pancreatitis > 6 days and evidence of acute cholecystitis are associated with a difficult LC (DoD >3).

Conclusion: Based on this result we suggest that LC for mild AGP is rarely difficult and this finding can be used in practice for selecting these patients for training lists.

Key statement: Based on this result we suggest that LC for mild AGP is rarely difficult and this finding can be used in practice for selecting these patients for training lists and can safely undergo a laparoscopic cholecystectomy.

P10

CLOSED-LOOP AUDIT ON POSTOPERATIVE CRP IN ORTHOPAEDIC PATIENTS

Presenter: Dr W Htet
Author(s): Dr W Htet, Dr A Ang, Dr M Javaid, Mr D Omnbude
Institution: Diana Princess of Wales Hospital (DPoW), Northern Lincolnshire and Goole NHS Foundation Trust, Grimsby, United Kingdom

Aims: C-reactive protein (CRP) is one of the routine investigations ordered by our orthopaedic team postoperatively. However, according to the literature, measurement of CRP is not recommended in the first 2-3 postoperative days. Therefore, we aimed to measure the practice at our institution against the recommendation of the literature.

Methods: We collected the data of 30 patients retrospectively using electronic records over the two weeks in May 2021. After presenting the findings of the first audit and educating the department staff locally, further data collection was completed in June 2021. The results were compared between the two cycles after analysis.

Results: The first cycle revealed that a CRP test was ordered in 83% of cases in immediate postoperative days. The second cycle reported that only 30% of patients had postoperative CRP test done on the second and third postoperative days. Thus, a massive improvement in compliance was achieved with the intervention.

Conclusion: We instigated the changes in our department and significant development has been demonstrated with this closed loop of the audit. It highlights the importance of high-quality implementation and the solid financial governance. Further audit cycles will be carried out in due course.

Key statement: Although the CRP test cost is inexpensive compared to other test modalities, this quickly accumulates when inappropriately requested for the numerous elective and emergency cases. We ensured the reduction of unnecessary expenditures since the test is not recommended by the literature and not clinically essential in the immediate postoperative days.

P11

EMOTIONAL INTELLIGENCE AND SELF-EFFICACY AS MEASURES OF BURN-OUT WITHIN DOCTORS

Presenter: Miss A Tutton
Author(s): Miss A Tutton[1], Miss E Blagrove[1], Mr A Mostada[2], Mr M Tutton[2], Miss S Sharif[3]
Institution: [1]Warwick University, United Kingdom, [2]Colchester Hospital, United Kingdom
[3]Royal London Hospital, United Kingdom

Aims: Strong emotional intelligence (EI) skills and high self-efficacy (SE) beliefs maintain mental wellbeing, reduce stress and improve clinical outcomes. COVID-19 has resulted in continuously stressful situations. The aim of this study was to measure and explore differences in EI and SE between specialities and grades of doctor.

Methods: We investigated how perceived EI and SE differs across specialities and grades using the Trait Emotional Intelligence Short Form (TEIQue-SF) and General Self-Efficacy Scale (GSE) scores. 108 doctors of all grades including Anaesthetists, General Surgeons, Obstetricians and Gynaecologists and Paediatricians took part.

Results: Core trainees (M = 30.00, SD = 3.16) and foundation doctors (M = 30.23, SD = 2.65) had reduced SE compared to consultants (M = 33.28, SD = 3.32) $p < 0.01$. General Surgeons EI self-control scores reduced with degree of experience; [t (38) = -2.036, p = 0.049].

Conclusion: Self-efficacy improved across all specialities with experience. Trainees need to feel empowered to make decisions as a means of improving SE. The loss of self-control within General Surgeons is a strong indicator of burn-out. Focused training in skills to improve EI may help prevent burn-out in the aftermath of COVID-19.

Key statement: Self-efficacy improved across all specialities with experience. Trainees need to feel empowered to make decisions as a means of improving SE. The loss of self-control within General Surgeons is a strong indicator of burn-out. Focused training in skills to improve EI may help prevent burn-out in the aftermath of COVID-19.

P12

INCIDENCE OF POSTOPERATIVE URINARY RETENTION AFTER ELECTIVE RECTAL CANCER SURGERY

Presenter: Dr M Gismondi
Author(s): Dr M Gismondi, Dr I Miglior, Mr N Merali, Mr I Jourdan, Professor T Rockall, Mr A Scala
Institution: Royal Surrey County Hospital, Guildford, United Kingdom

Aims: Enhanced recovery after surgery (ERAS) is a multimodal perioperative care pathway, designed to achieve early recovery after surgical procedures. Early removal of urinary catheter is paramount to reduce UTIs and low satisfaction. Our aim is to assess the incidence of postoperative urinary retention (POUR) after elective rectal cancer surgery.

Methods: 199 patients who underwent Low Anterior Resection (LAR) or Abdomino-perineal excision/resection (APER) for rectal cancer during an eight-year period were included at a single-center. Data was collected retrospectively and POUR has been defined as the inability to void without a urethral catheter at the time of hospital discharge.

Results: 48 patients underwent an APER and 151 had a LAR. 37 patients developed POUR. The highest incidence of POUR was 60-80 years (n=29). The highest incidence of POUR was recorded in tumours from 5-10cm from the anal verge. 6 out of the 37 POUR patients had neo-adjuvant radiotherapy.

Conclusion: Within the limitations of this retrospective single unit audit, POUR seems to be more common in males, patients undergoing APER and patients undergoing low anterior resections for tumours between 5 and 10cm. No association was found with preoperative radiotherapy.

Key statement: High-risk patients could be identified in advance and should be considered for inter-operative suprapubic catheterization (SPC) rather than indwelling urinary catheterization to reduce hospital and community costs. We will perform a prospective audit over the next 6 months to assess the potential beneficial effects of SPC on such patients.

P13

THE ROLE OF TEXTURE ANALYSIS OF MRI IN PREDICTION OF LOCAL RECURRENCE AND DISTANT METASTASIS IN LOCALLY ADVANCED RECTAL CANCER

Presenter: Mr M Rahawi
Author(s): Mr M Rahawi[1], Mr M Aker[1], Dr B Ganeshan[2], Professor T Arulampalam[1]
Institution: [1]ICENI Centre, Colchester, United Kingdom, [2]UCLH, London, United Kingdom

Aims: Treatment of Locally advanced rectal cancer (LARC) includes neoadjuvant chemoradiotherapy (NCRT) and surgery. MRI is used for staging and restaging. Texture analysis (TA) is an imaging biomarker that assesses heterogeneity in MRIs by measuring grey-level intensities distribution. This study hypothesizes that TA MRI can predict local recurrence and distant metastasis.

Method: This is a retrospective analysis of LARC patients after NCRT. Six texture parameters were systematically extracted from post-treatment T2-weighted MRI images. Ability to predict LR and DM was assessed by Mann-Whitney U test and ROC curves. Survival Kaplan-Meier curves were also generated.

Results: 113 patients were included. Two texture parameters significantly predicted local recurrence: Entropy (p=0.033) and mean of positive pixels (MPP) (p=0.045). Meanwhile, five parameters predicted distant metastases: SD(p=0.015), entropy(p=0.017), MPP(p=0.005), skewness (p=0.046), and Kurtosis (P=0.019). Kaplan-Meier Log rank test showed that entropy and skewness independently predicted distant metastases.

Conclusion: MRI textural features are potentially significant imaging biomarkers in predicting local recurrence and distant metastases in LARC treated with NCRT. Its utility in restaging after neoadjuvant treatment needs to be further assessed in prospective studies.

Key statement: This study indicates that textural parameters could predict local recurrence and liver metastasis in LARC patients. This could aid in models aimed to personalize treatment of LARC patients by using a non-invasive imaging biomarker. However, more clinical, histological and genomic correlations is still required in the future research.

P14

3D- VS. 2D-IMAGING TECHNOLOGY IN LAPAROSCOPIC SURGERY: OPPORTUNITY COST ANALYSIS OF OPERATING ROOM TIME SAVINGS IN GERMANY- AND UK-BASED HOSPITALS

Presenter: Mr A Zervakis
Author(s): Dr R Wahba[1,2], Ms L Bruno[3], Mr A Zervakis[4], Dr M Thomas[1], Dr A Urbanski[1]
Institution: [1]University Hospital Cologne, Germany. [2]University of Cologne, Germany. [3]Olympus Europe SE & Co. KG, Hamburg, Germany. [4]Olympus UK & Ireland, Southend-on-Sea, United Kingdom

Aims: Opportunity cost (OC) analysis is key when evaluating surgical techniques. Operating room (OR) time is one potential source of OC in laparoscopic surgery. This study quantifies differences in OR time between 3D- and 2D-imaging technology in laparoscopic surgery, translates these into OC and models the economic impact in real-world hospitals.

Methods: A systematically performed literature review and meta-analysis were performed. Methods to translate OR time savings into OC were theorised and a budget impact model was created. The potential time savings of real-world hospital case mixes were extrapolated and the opportunity costs of not using 3D-imaging in laparoscopic surgery were evaluated.

Results: Average OR time saving per laparoscopic procedure was -19.4 minutes (-24.3; -14.5) (-14%) in favour of 3D. The Budget Impact Model demonstrated an economic impact ranging from £183,045-£866,316 in the British and 73,049€-437,829€ in German hospitals, modelling a mixture of cost savings and performing additional procedures (earning additional revenue).

Conclusion: The OC analysis revealed significant economic benefits of introducing 3D-imaging technology in laparoscopic surgery, on the basis that average procedure time is reduced. Utilising the saved OR time to perform additional procedures was the biggest driver of OC. Hospital case mix and procedure volume indicated the magnitude of the OC.

Key statement: 3D-imaging technology can be a useful tool to help hospitals optimise OR utilisation. Time saved can be used to perform additional procedures, subsequently helping to reduce surgical backlogs. Depending on hospital structure and case mix, adoption of 3D-imaging can subsequently result in increased hospital revenue and OR time-related cost savings.

P15

LAPAROSCOPIC GASTROPEXY FOR MANAGING HIATAL HERNIA IN ELDERLY PATIENTS

Presenter: Mr M Elshazly
Author(s): Mr M Elshazly, Mr R Satchidanand
Institution: Southport & Ormskirk NHS Trust, Southport, United Kingdom

Aims: The aim is to evaluate the effectiveness of the gastropexy procedure for large hiatal hernia repair in elderly patients with multiple comorbidities as an alternative option instead of a long anti-reflux surgery which can be of high risk.

Methods: We retrospectively evaluated 9 patients who underwent laparoscopic gastropexy for hiatal hernia from November 2018 to June 2021. 6 patients were male and 3 were female with a median age of 77 years. The major complaints were difficulty in swallowing, pain and reflux with recurrent gastric volvulus and intermittent obstruction.

Results: All patients underwent a successful planned laparoscopic surgery with no conversion to laparotomy. No perioperative complications occurred, and the main complaint resolved rapidly in all patients. Two patients complained of some recurrence of symptoms during postoperative follow-up of 32 months.

Conclusion: Laparoscopic gastropexy is safe and effective and can be considered as a surgical option to offer for large hiatal hernias in elderly patients, where surgical options are limited in view of their other comorbidities.

Key statement: Hiatal hernia, Gastropexy, Elderly patients.

P16

MINIMIZING FOREIGN BODY IN EMERGENCY OBSTRUCTED FEMORAL HERNIA SURGERY (LAPAROSCOPIC)

Presenter: Dr E Zeb
Author(s): Dr E Zeb, Mr S Sabri, Mr L Watton, Dr K Thoma, Mr A Mihailescu
Institution: Tameside General Hospital, Manchester, United Kingdom

Aims: Femoral Hernia can present as obstruction, strangulation or just as a lump. Its learning curve takes longer as compared to inguinal hernia surgery. There are new considerations of taking patient into confidence about the various types of mesh and its placement as body response is variable to composition of mesh.

Methods: In our case report at a DGH hospital, a laparoscopic approach was adopted to assess the incarcerated anti-mesenteric border of small bowel which was herniating through femoral ring. Following delivery of bowel knuckle, it was hyperaemic in nature but regained peristalsis. Therefore mesh placement was not considered.

Results: Following the safe diagnostic laparoscopy with blunt and sharp dissection, in this elderly patient, the bowel delivered outside along with herniating peritoneum. Instead of using a mesh for the repair, two endo-loops were used for obliteration of femoral ring. Patient made a good post-op recovery and discharged.

Conclusion: Mesh placement has its own issues including neurological pain. 5% of the patient's may develop a major complication with mesh. In our case, due to patient being elderly along with medical co-morbidities, bowel resection and anastomosis was not indicated. Femoral canal was plugged with two endo-loops secured.

Key statement: Endo-loop ligature facilitates ligation of pedicles in laparoscopic procedures. It consists of an 18 inch long ligature in a plastic tube. We have arranged a 6 weeks follow-up to reassure her about the site of surgery.

P17

LAPAROSCOPIC NEPHROURETERECTOMY FOR UROTHELIAL CANCER – A DECADE OF REVIEW

Presenter: Mr MM Mohammed
Author(s): Mr PH Rajjayabun[1], Mr MM Mohammed[1,2]
Institution: [1]Worcestershire Acute Hospitals NHS Trust, United Kingdom
[2]South Egypt Cancer Institute, Assiut University, Egypt

Aims: To review the short and long-term outcomes post-laparoscopic nephroureterectomy over a 12-year period from a single surgeon in UK centre. This review was to include intra-operative data, patient complications as per Clavien Dindo classification, pathological and oncological outcomes.

Methods: Using electronic notes review of patients who had undergone LNU between October 2009 and November 2020 a comprehensive data set was collected. Data for 74 patients was carefully reviewed and measured against outcome standards as described by the British Association of Urological Surgeons (BAUS).

Results: Median age 74 (range 40-91) years. For 81% patients there were no significant complications, Clavien Dindo 1 (9) 2 (3) 3 (0), 4 (1). Transfusion rate 2.7%, Zero conversions. Median hospital stay 5 (range 1-26) days. Staging was Ta (35), T1 (7), T2 (10), T3 (20). Cancer specific mortality 8%.

Conclusion: Laparoscopic radical nephroureterectomy is a safe option for patients with upper tract disease. Our results show good operative and oncological outcomes in keeping with contemporary UK data. The advantages of laparoscopy in terms of length of stay, reduced blood loss and complications are consolidated through our observations.

Key statement: Laparoscopic radical nephroureterectomy may soon become the procedure of choice for the ablative management of upper tract urothelial carcinoma - including higher risk tumors. We will specifically explore further the role of laparoscopic lymph node dissection for this sub-group of patients in the near future.

P18

TO CLOSE OR NOT TO CLOSE THE HARTMANN'S POUCH AFTER SUBTOTAL CHOLECYSTECTOMY: A SINGLE-CENTRE LONG-TERM FOLLOW-UP STUDY

Presenter: Dr AS Bodla
Author(s): Dr AS Bodla, Dr M Umair Rashid, Dr M Hassan, Mr G Kirby
Institution: Shrewsbury and Telford Hospital NHS Trust, Shrewsbury, United Kingdom

Aims: Subtotal Cholecystectomy (STC) has been reported as an effective method to remove gallbladder if the Calot's triangle anatomy is unfavourable. However, evidence on its long-term outcomes from the UK is lacking. Aims of this study were to assess short and long-term outcomes of Type-1 and Type-2 STC (≥1-year follow-up).

Methods: We retrospectively analysed all elective and emergency STC performed in a single UK NHS Trust between 2014-2020. Relevant data were collected using electronic patient records and questionnaire-based long-term telephonic follow-up (median follow-up 3.7 years). Outcomes examined were: Immediate/Short-term (biliary injury, bile leak, return-to-theatre); Long-term (recurrent symptoms, choledocholithiasis, cholangitis/pancreatitis).

Results:

Parameters	STC Type-1	STC Type-2	P-value
Total Cases	38	12	-
Emergency	21 (55%)	7 (58%)	0.83
Biliary Injury	0	0	-
Bile-Leak	3 (8%)	4 (33%)	0.04*
Choledocholithiasis	4 (10.5%)	0	0.24
Recurrent symptoms	8 (21%)	1 (8.3%)	0.32
Long-term Cholangitis/Pancreatitis	2 (5.3%)	0	0.42
Mortality	1 (2.6%)	1 (8.3%)	0.38

Conclusion: Overall, both types of STC (closure of Hartmann's pouch or not) were comparable. Both prevented biliary injury. Risk of bile leak can be reduced by closing Hartmann's pouch remnant but this may slightly increase the risk of subsequent stone formation. Recurrent symptoms were mostly mild and rarely required intervention.

Key statement: In addition to its safety in preventing biliary injury, we report STC to be an effective and pragmatic approach to cure gallstone disease with infrequent occurrence of recurrent symptoms in the long-run and minimal need for further interventions. Reconstituting (Type-1) STC seems more favourable due to less bile leak risk.

P19

EARLY EXPERIENCE OF UNDERTAKING ROBOTIC-ASSISTED TOTAL MESORECTAL EXCISION IN RECTAL RESECTIONS, AVOIDING A DIVERTING STOMA: KHANS TECHNIQUE – A CASE SERIES

Presenter: Dr A Yiu
Author(s): Dr A Yiu[1], Mr E Anand[2], Mr S Stefan[2], Mr N Siddiqi[3], Professor J Khan[2,4]
Institution: [1]Maidstone and Tunbridge Wells NHS Trust, Tunbridge Wells, United Kingdom
[2]Portsmouth Hospitals University NHS Trust, United Kingdom
[3]University Hospital Dorset, Poole, United Kingdom
[4]University of Portsmouth, United Kingdom

Aims: We evaluated a novel technique using the da Vinci® robotic platform (Intuitive Surgical) to reinforce the colorectal anastomosis and rectal staple line with sutures, and rectal resection and assessment of the anastomotic perfusion, using the Portsmouth protocol to avoid a diverting stoma in rectal cancer surgery.

Methods: We used indocyanine green to determine the transection level and check the vascularity of the circular anastomosis. Distal transverse and circular staple lines of the colorectal anastomosis were reinforced with absorbable interrupted stitches (KHANS technique). Colorectal/anal anastomosis integrity was checked using underwater air-water leak test, with concomitant flexible sigmoidoscopy.

Results: Fifty patients underwent total mesorectal excision for cancer using KHANS technique. All cases avoided diverting stoma. One patient had radiological leak and pelvic abscess. Anastomosis was <5 cm anal verge in 56% cases. Median length of stay was 5 (3-34) days; two 30-day readmissions. No 90-day mortality or 30-day reoperations.

Conclusion: The KHANS (Key enHancement of the Anastomosis for No Stoma) technique appears feasible, successful, and safe in decreasing the incidence of diverting stomas in rectal resections.

Key statement: This presentation describes a new surgical technique used to reduce the need for diverting stomas in conjunction with robotic TME surgery for rectal cancer.

P20

USE OF OPIOID ANALGESIA FOLLOWING SURGERY, A DEVELOPING EPIDEMIC?

Presenter: Dr KA Vijayagopal
Author(s): Dr KA Vijayagopal, Mr T Majeed, Mr J Wilson, Professor C Magee
Institution: Wirral University Teaching Hospital, United Kingdom

Aims: Ascertaining current opioid prescription practice in a UK general surgical unit.

Methods: Retrospective analysis of general surgical unit opiod prescriptions. Data included prescribed opioids on discharge, 1, 3- and 6-months post-discharge usage, milligrams of morphine equivalence (mgEq) to compare regimes. The first 100 patients discharged from surgical services in June 2020 were reviewed.

Results: 35% were opioid-naïve on admission and 20%, 5.71% and 8.57% remained on opioids at 1, 3- and 6-months post-discharge respectively. Only 11% with pre-existing opioid use were reviewed by the acute pain team. Those reviewed by the pain team more likely to remain on long-term opioids, at considerably lower doses.

Conclusion: Tapering doses of opioids not utilised. Only 6% of discharge summaries recommended GP follow-up of pain. Standardised assessments (opioid Risk Assessment Tools) and mgEq need to be monitored in primary and tertiary care. Acute pain team services should be offered to more patients. Development of opioid stewardship in surgical patients.

Key statement: There is relatively little documented in the analgesia requirements. A standardised approach to analgesia with opioid stewardship needs to be implemented and incorporated into local policy. In the surgical population, the acute pain team is a valuable resource and their services should be extended to encompass more patients.

P21

EARLY CLINICAL AND ONCOLOGICAL EXPERIENCE WITH ROBOTIC APER (ROTAPE)

Presenter: Mr S Stefan
Author(s): Mr A Botros[1], Mr L Kumar[1], Mr K Tsimogiannis[1,2], Mr S Stefan[1], Professor J Khan[1,3]
Institution: [1]Portsmouth NHS University Hospitals, United Kingdom
[2]Institution for Surgical Sciences, Uppsala University, Sweden
[3]University of Portsmouth, United Kingdom

Aims: Extralevator abdominoperineal excision was introduced to reduce intraoperative tumour perforation and CRM involvement. However it's associated with increased morbidity and the need to turn the patient prone. Robots can potentially mitigate some of these risks due to enhanced dexterity and the ability to selectively divide the levator muscles intra-abdominally.

Methods: Consecutive patients with low rectal cancer who underwent robotic APER between 2018-2019 were included. Patients received modified extralevator APE (RoTAPE) with division of levator on side of tumour and intra-abdominally using the robot. Primary aim was to assess 2-year DFS and OS. Secondary objectives were to assess morbidity and LOS.

Results: 8 patients, median age 72.5, 4 with T3/T4 tumours. 3 received neo-adjuvant therapy. There were no conversions. There was 1 R1 resection. 2 years OS was 88%, DFS was 75%. Three grade 2 and two grade ≥3 Clavien-Dindo complications. 1 patient had perineal wound infection. Median LOS was 12 days.

Conclusion: RoTAPE is a safe surgical approach, with short term results comparable to open/lap ELAPE. By offering better ergonomics for operating low in the pelvis, RoTAPE allows performing intra-abdominal division of levators therefore avoiding the prone position. By facilitating individualised treatment RoTAPE reduces surgical trauma and associated complications.

Key statement: This study demonstrates technical feasibility and short-term oncological safety of Robotic APER. Studies comparing long term oncological and functional outcomes of open, lap and robotic techniques are required to demonstrate advantages of Robotic APER.

P22

AN AUDIT TO ASSESS PRESCRIPTION RATES OF THROMBOEMBOLIC DETERRENT STOCKINGS (TEDS) IN SURGICAL PATIENTS

Presenter: Dr T Theivendrampillai
Author(s): Dr T Theivendrampillai, Dr M Chacon Garcia, Mr N Merali, Mr A Frampton
Institution: Royal Surrey County Hospital, Guildford, United Kingdom

Aims: Hospitalization increases the risk of venous thromboembolisms including deep venous thrombosis and pulmonary embolism. NICE guidelines states that all surgical patients should be offered mechanical (TED stockings) and pharmacological thromboprophylaxis. The aim of the audit is to assess the use of TED stockings in surgical patients as per NICE guidelines.

Methods: The audit assessed the percentage of patients that were prescribed VTE who were admitted under the acute surgical take. The first cycles adopted a retrospective approach. The implemented change was the introduction of a VTE checklist to ensure prescription of TEDs and LMWH. The second cycle adopted a prospective approach.

Results: The first cycle showed that only 21 of 81 patients (26%) had TEDS prescribed. After implementation of the checklist, the second cycle showed that 60 of the 63 patients (92%) had TEDS prescribed. The audit also shows an improvement in the prescription of LMWH from 96% to 100%.

Conclusion: Once a VTE checklist was implemented, the percentage of patients that were prescribed TEDS rose significantly from 26% to 92%. Likewise, the percentage of patients prescribed LMWH improved from 96% to 100%, thereby meeting NICE guidelines.

Key statement: Hospitalization increases the risk of venous thromboembolisms, especially in surgical patients and carries significant morbidity and mortality to the patient and has significant costs to the NHS. Prevention of VTE is essential and is easily achievable with necessary checks in place.

Reference: 1. https://www.nice.org.uk/guidance/ng89/chapter/Recommendations

P23

LAPAROSCOPIC MANAGEMENT OF HEMOPERITONEUM DUE TO RUPTURED HETEROTOPIC PREGNANCY

Presenter: Mr M Fahim
Author(s): Mr M Fahim[1], Mr A James[2], Ms H Gandhi[2]
Institution: [1]Surrey & Sussex Healthcare NHS Trust, Redhill, Surrey, United Kingdom
[2]East Surrey Hospital, Redhill, Surrey, United Kingdom

Aims: This case reports identifies the rare and potentially life threatening condition of hemoperitoneum presented with signs of haemorrhagic shock in a patient with ruptured heterotopic pregnancy and definitive management by laparoscopic approach led by consultant surgeon and gynaecologist.

Methods: A 31 year old woman presented in emergency department with lower abdominal pain, signs of peritoneal irritation and hypovolemic shock. She was 8 weeks pregnant confirmed on an ultrasound scan. Initially managed in resuscitation room in ED with intravenous fluid therapy and blood transfusion.

Results: She underwent diagnostic laparoscopy led by consultant surgeon and gynaecologist which revealed blood clots in peritoneal cavity. Laparoscopic washout of hemoperitoneum and right salpingectomy was performed for ruptured and bleeding Fallopian tube. Histological examination confirmed chorionic villi consistent with products of conception in the right Fallopian tube.

Conclusion: This case presents with a crucial learning point; features of tubal rupture or acute abdomen, despite confirmed intra uterine pregnancy, should continue to warrant the consideration of heterotopic pregnancy as a differential diagnosis. A teamwork approach involving multiple specialties is often necessary for management of patients with uncertain diagnosis.

Key statement: Use of available resources including help and expertise from various specialties with their skills in laparoscopy can lead to satisfactory patient outcome.

P24

SUCRALFATE ENEMAS AND ARGON PLASMA COAGULATION FOR RADIATION PROCTITIS

Presenter: Dr S Ng
Author(s): Dr S Ng, Ms R Ritchie, Mr O Komolafe
Institution: Wishaw General Hospital, Lanarkshire, United Kingdom

Aims: Radiation proctitis (RP) is a troubling side effect of external beam radiotherapy treatment of pelvic malignancies. This study aims to determine the efficacy and safety of sucralfate enemas (SE) and argon plasma coagulation (APC) in the treatment of RP.

Methods: A total of 11 patients who received SE for radiation proctitis were identified via the hospital pharmacy dispensary records between March 2019 and June 2021. Patients' notes were studied retrospectively using clinical portal. All patients were prescribed at least one course (28 days) of Sucralfate enemas 2g twice daily.

Results: Of n=10 who underwent distal GI endoscopy, 30% had mild, 50% moderate and 20% had severe RP. The median follow-up period was 6 months (range 1-56). Of patients who received both treatments, 12.5%, 62.5% and 25% reported no, partial and complete improvement in their symptoms respectively with no reported complications.

Conclusion: When SE and APC are used in combination, the majority of patients report some degree of clinical improvement to their symptoms. There was no correlation between documented endoscopic severity of RP and response to treatment.

Key statement: SE and APC are both safe and reasonable treatment options for RP. The large proportion of patients reporting improvement is encouraging. However, the incomplete symptom resolution in most patients are concurrent with pre-existing literature of small volume studies which echo the variability in patient responses to both forms of treatment.

P25

DOCUMENTATION OF REASONABLY PREDICTABLE PROCEDURE RELATED RISKS AND COMPLICATIONS OF LAPAROSCOPIC APPENDICECTOMY ON CONSENT FORM

Presenter: Mr M Fahim
Author(s): Mr M Fahim, Dr SI Abbasi, Mr S Monkhouse
Institution: East Surrey Hospital, Redhill, United Kingdom

Aims: Aim of this local audit was to assess the accuracy of documentation of reasonably predictable procedure related risks and complications of laparoscopic appendicectomy on standard consent form 1.

Methods: The data was collected from the consent form for the patients who underwent laparoscopic appendectomy between the months of October and November 2020. We recorded the primary procedure for which consent was obtained, any additional procedure recorded and potential risks/complications recorded on the consent form.

Results: Laparoscopic appendectomy was recorded as primary procedure in all of the consent forms. Conversion to open procedure was recorded in only 60%. Other potential risks and complications included Infection 92%, Bleeding 82%, DVT/PE 60%, damage/Injury to surrounding structures 67%, COVID infection 60% and abdominal collection 35%.

Conclusion: There is inconsistency in the documentation of the additional procedures and associated potential risks associated with laparoscopic appendectomy. Moreover, not all the potential risks have been documented in each consent form.

Key statement: A standardized consent form for laparoscopic appendicectomy may help in adoption of uniform approach in the process of gaining informed consent by alleviating unnecessary patient anxiety and at the same time providing and documenting all the necessary information.

P26

IMPROVING SURGICAL HANDOVER – A COMPLETE AUDIT LOOP

Presenter: Mr M Fahim
Author(s): Mr M Fahim, Dr SI Abbasi, Mr S Monkhouse
Institution: East Surrey Hospital, Redhill, United Kingdom

Aims: Aim of this audit was to assess the documentation of minimum information required for effective handover of patients with diagnosis of acute pancreatitis admitted in surgical assessment unit (SAU) on handover sheets between surgical teams.

Methods: Standards of audit were identified and minimum information required was recorded from handover sheets retrospectively. Audit report was presented in the departmental audit meeting and recommendations made. Re-audit was done after implementation of recommendations.

Results: The minimum information was found missing on handover sheets in a significant number of patients including documentation of gender, possible cause and severity, pending/outstanding jobs and results of investigations. There was significant improvement with good compliance in handover documentation as evidenced by P-value of 0.002 after implementation of recommendations.

Conclusion: A carefully conducted audit helps us identifying the potential gaps in our clinical practice. An agreed action plan helps improve the service. Reminder posters, educational sessions and individual emails all can help in improving the clinical practice.

Key statement: The practice of clinical audits and quality improvement projects are among the preferred ways of keeping up with good surgical practice. A carefully conducted audit and implementing the change in clinical practice can help in improvement and delivery of clinical service.

P27

COMPLIANCE OF FILLING IN CONSENT FORM 1 IN PATIENTS UNDERGOING LAPAROSCOPIC CHOLECYSTECTOMY

Presenter: Mr M Fahim
Author(s): Mr M Fahim, Dr E Hussain, Dr M Futcher, Mr S Monkhouse
Institution: East Surrey Hospital, Redhill, United Kingdom

Aims: To assess the compliance of filling in Consent Form 1 in patients undergoing Laparoscopic Cholecystectomy with details around the essential points of the proposed procedure, intended benefits, associated side effects, reasonably predictable risks, additional procedures and other treatment options along with type of anaesthesia.

Methods: A total of 117 patients underwent laparoscopic cholecystectomy during study time period of two months were selected. The Audit standards relating to Consent 2011 Questionnaire was used to record the outcome of consent form 1.

Results: The important findings are presented in the following table:

Parameters	Compliance (%)
Name of Consultant	92
Surgeon name	100
Grade of Surgeon	92
Proposed Procedure	100
Primary procedure carried out	100
Additional procedure	90
Need blood transfusion documented	30
Secondary procedure carried out	28

Conclusion: Consent form 1 contains a lot of information and not all the columns are filled in at the time of documentation of process of informed consent. Continued evaluation of documentation process and pre-printed standardized consent forms along with patient information leaflet may help in achieving good compliance.

Key statement: A continued process of evaluation of consent process documentation and use of standardized structured consent form to record the process of verbal discussion around informed consent for laparoscopic cholecystectomy may improve the compliance.

P28

ASSESSMENT AND MANAGEMENT OF AKI IN SURGICAL PATIENTS

Presenter: Mr A Ammar
Author(s): Mr A Ammar, Dr A Saab, Dr E Rostand
Institution: The Mid Yorkshire Hospitals NHS Trust, Wakefield, United Kingdom

Aims: To audit the current management and outcomes of surgical patients presenting with acute kidney injury against the AKI bundle trust policy.

Methods:
- Retrospective data collection between May - June 2021 for all surgical inpatients admitted either on an acute or elective basis at the Mid Yorkshire Hospitals NHS trust with a laboratory diagnosis of AKI
- Data set collection: Age, Gender, Co-morbidities, AKI stage, Bloods performed, Contrast scan, Medication review, Fluids prescribed, Documentation & outcome

Results:
- Variable compliance with tests performed: 100% with FBCs, U&Es- less with Ca,blood gases and urine dip (73,45&9% respectively)
- 90% of patients had IVI prescribed
- 54% of patients had medication review
- All patients showed an improved creatinine level following initial rise
- 40% documentation of AKI on discharge letter

Conclusion:
- Fairly low incidence of AKI in the department
- Efficient management with 100% resolution rate in actively treated patient
- Low compliance with documentation
- Need to complete full investigations for patients

Key statement: Although AKI seems to be addressed rigorously when it happens , Completing the necessary investigations and proper documentation whether during hospital stay or on discharge are definitely areas for improvement to ensure efficient patient management and continuity of care.

P29

LAPAROSCOPIC COLORECTAL CANCER SURGERY AT DISTRICT GENERAL HOSPITAL: FINDINGS FROM A SINGLE CENTER STUDY

Presenter: Mr M Fahim
Author(s): Mr A Elzaafrany, Mr M Fahim, Mr A Tawfik, Mr A Day
Institution: East Surrey Hospital, Redhill, United Kingdom

Aims: The primary outcome measure was postoperative length of stay (LoS), with secondary outcomes including approach of surgical operation and conversion rate, R0 resection and postoperative DVT over a period of one year.

Methods: A single center, retrospective, observational study was performed over a period of one year. Patients who underwent elective bowel cancer surgery were identified. Patients were eligible for study inclusion if they had undergone planned surgical procedure for colorectal cancer after being discussed in local colorectal cancer MDT.

Results: A total of 123 patients were included. Mean length of stay was 7.97 days. 74.7% of the procedures were performed by laparoscopic approach with conversion rate of 6.5%. R0 resection was achieved in 81.3% while 3.2% had R1 resection. Six patients had developed post-operative DVT and one inpatient death recorded.

Conclusion: Laparoscopic approach is the preferred method for elective colorectal resection surgeries with acceptable traditional measures of patient outcome including R0 resection, postoperative length of stay and DVT.

Key statement: Laparoscopic colorectal cancer resection is the preferred and safe approach being practiced at district general hospitals with acceptable post-operative outcomes.

P30

MESH RELATED MORBIDITY: AN UNDERAPPRECIATED SOURCE OF MORBIDITY FOLLOWING LAPAROSCOPIC ABDOMINOPERINEAL (AP) RESECTION

Presenter: Mr O Aly
Author(s): Mr O Aly, Miss T Kaluarachchi, Mr T Moore
Institution: Royal Hampshire County Hospital, Winchester, United Kingdom

Aims: Abdominoperineal resection is established as the standard treatment of low rectal cancer. Neoadjuvant radiotherapy has improved oncological outcomes and minimally invasive surgery has reduced surgery-related morbidity. However, the ideal closure method for the perineal wound remains undecided and using a mesh carries specific morbidity which requires further investigation.

Methods: This was a retrospective case series of patients that underwent laparoscopic AP resection for rectal adenocarcinoma (2017-2021). We compared patients following prosthetic-coated mesh closure vs primary closure. Outcomes studied were return to theatre and total length of stay. Statistical analysis was performed using the CHI2 test and Student's T-test (=0.05).

Results: Twenty-three (74%) patients underwent mesh closure (MC) and 8(26%) patients underwent primary closure (PC). The (MC) group had 5 patients return to theatre, none of the (PC) group required re-operation (P=0.19). The median Length of Stay (LOS) was 10.5 days for the mesh group vs 7.5 days (PC)(P=0.06).

Conclusion: Our results demonstrated that mesh closure following laparoscopic AP resection was associated with a delayed morbidity in the form of re-operative open surgery. There was a trend towards a longer LOS following mesh closure. More data is required to identify the significance of mesh related morbidity in AP resection.

Key statement: The delayed morbidity of mesh closure in laparoscopic AP resection is clinically underappreciated entity and source of delayed re-operative open surgery. Future research should investigate this significant non-oncological morbidity. It should identify the ideal closure method and the safety profiles of the wide variety of available prosthetic material.

P31

LAPAROSCOPIC COLECTOMY IN ACUTE SEVERE COLITIS. A PROSPECTIVE COHORT STUDY AND A STEP-BY-STEP APPROACH FOR GENERAL SURGEONS

Presenter: Dr M Malik
Author(s): Dr M Malik, Dr K Tsimogiannis, Dr L Kumar, Dr S Stefan, Professor J Khan
Institution: Portsmouth Hospitals University NHS Trust, Portsmouth, United Kingdom

Aims: Studies have stated laparoscopic surgery to be beneficial in management of acute ulcerative colitis (UC). However, recent NELA data of 1204 patients reported 32% patients had attempted laparoscopic procedure with 30 day inpatient mortality of 2.9%. We present our ten year experience of emergency laparoscopic subtotal colectomy (STC) for acute UC.

Methods: Single-centre prospective cohort study including all consecutive patients with severe UC who underwent emergency laparoscopic subtotal colectomy between 2009 -2018 at Portsmouth Hospitals University NHS Trust. The aim of the study was to assess the feasibility and safety of the laparoscopic approach for colectomy in the emergency setting.

Results: 70 patients (41 female) underwent laparoscopic STC. Mean operative time 211 minutes (85-430) with no open conversions. 30 day mortality was 0% and mean stay was 10 days (5-40). There were 7 readmissions, 4 wound infections and 3 SBO. None required invasive intervention. Five Clavien-Dindo grade III and IV complications were recorded.

Conclusion: Laparoscopic emergency subtotal colectomy is a safe option in patients with acute severe ulcerative colitis. A change in mind set, encouraging surgeons to undertake laparoscopic surgery in emergency setting has a potential of providing better patient outcomes.

Key statement: Emergency laparoscopic STC is feasible and safe option with favourable post-op outcomes.

P32

THE FUTURE OF VIRTUAL PLATFORMS IN LAPAROSCOPIC TRAINING

Presenter: Ms S Schaffer
Author(s): Ms S Schaffer[1], Mr P O'Neill[1], Mr J Coombs[1], Mr T Payne[2], Mr M Abouelazayem[3]
Institution: [1]St George's, University of London, United Kingdom
[2]St George's Hospital, London, United Kingdom
[3]Royal Free Hospital, London, United Kingdom

Aims: Laparoscopy has become a core surgical skill and there is an increasing demand for robust basic laparoscopic skills courses. Virtually-delivered laparoscopic courses may decrease costs and increase accessibility to training compared to in-person courses. This study evaluated the efficacy of virtually-delivered laparoscopic training.

Methods: We delivered a surgeon-led basic laparoscopic skills course for 42 medical students, teaching four tasks via in-person and virtual platforms. Course efficacy was determined using pre and post-course quantitative task measurements and surveys assessing student knowledge, confidence, and laparoscopic skill. Data was analysed using paired T-tests on SPSS software.

Results: Four tasks were evaluated using seven quantitative measures. Changes in pre versus post-course scores were calculated, and then compared between the in-person and virtually taught cohorts, with the p-values listed below.

Task	In-person vs virtual comparison P-value
1	0.605
2	0.725
3	0.253
4	0.236

Conclusion: Our results demonstrated no significant differences between the two delivery platforms, indicating virtually taught courses are effective and may be used as an alternative to in-person laparoscopic training. Further research is required to determine if virtual platforms can effectively teach advanced laparoscopic skills.

Key statement: Teaching laparoscopic skills on a virtual platform is effective, with no significant difference to in-person training. Virtual platforms should be considered to increase accessibility worldwide, provide greater flexibility, and lower laparoscopic skills training costs.

P33

THE CHOLE-SLOW PROJECT – AN UNDERTAKING TO IMPROVE EFFICIENCY AND VALIDATE ELECTIVE LAPAROSCOPIC CHOLECYSTECTOMY WAITING LIST

Presenter: Dr M Chacon Garcia
Author(s): Dr M Chacon Garcia, Dr T Theivendrampillai, Mr A Frampton
Institution: Royal Surrey County Hospital, Guildford, United Kingdom

Aims: Current recommendations suggest that the maximum waiting time for non-urgent Consultant led treatments is 18 weeks and that 95% of patients should meet this target. The aim of this project is to create a database that validates long waiters, in order to expedite their surgery.

Methods: Proposed database was easily accessed by consultants and it included patients who were waiting for a laparoscopic cholecystectomy for more than 8 weeks. It provided key information such as comorbidities, blood results, scans, which guided surgeons during consultations to prioritise patients and to ensure patients were ready for surgery, avoiding further delays.

Results: Our sample identified 74 long waiters with an average waiting time of 31.7 weeks with 17.6% of these patients waiting for more than 52 weeks, therefore failing recommendations. With implementation of our proposed database consultants were able to enhance patient care by validating and prioritising the long waiters.

Conclusion: The Chole-Slow project has helped to prepare and validate the pooled theatre list by allowing surgeons to save time at clinical review, improving efficiency when booking a case onto a list and ensuring patient safety by prioritizing disease, completing investigations prior surgery and making sure patients are medically fit to proceed with surgery.

Key statement: Long waiters should be validated in order to ensure patient safety. Simple implementation of databases can not only aid patients' safety but also patients' satisfaction.

P34

POLYMERIC CLIPS AS ENDOLOOP'S ALTERNATIVE TO SECURE APPENDICULAR STUMP IN EMERGENCY LAPAROSCOPIC APPENDICECTOMY - A ONE YEAR EVALUATION

Presenter: Dr M Lee
Author(s): Mr JCK Ng[1], Mr Z Khanzada[2], Dr M Lee[1], Mr A El-Sharkawy[2], Mr B Bharathan[1]
Institution: [1]Nottingham University Hospitals, Nottingham, United Kingdom
[2]University Hospitals of Derby and Burton, Derby, United Kingdom

Aims: To evaluate the change in practice following implementation of polymeric clips (PC) as an alternative to secure appendicular stump in adult emergency laparoscopic appendicectomy (LA). This is following a first audit advocating safety and advantages of PC, in order to make detailed comparison over an extended period of time.

Methods: Retrospective analysis of all patients underwent laparoscopic appendicectomy from 1/11/19 to 31/10/20 following introduction of PC in October 2019. Patient demographics, intraoperative severity of appendicitis, methods to control the appendicular stump/mesoappendix and post-operative complications were recorded and analysed using SPSS.

Results: Among 361 LAs, PC were used in 160 cases. Patient demographics and severity of appendicitis were statistically similar. Operative time was 10 minutes shorter in PC group (p=0.001). Laparoscopic clip applicator was more frequently used in Endoloop group (p=0.001) on mesoappendix. Post-operative ileus was more frequent in endoloop group (p=0.003).

Conclusion: There is a potential cost saving of £196.15 to £236.87 per case by using PC instead of Endoloops. This comes with no increased risk of complication and shorter duration of procedure. A switch from Endoloops to PC during the study period (1 year) could save over £35000.

Key statement: The use of PC in laparoscopic appendicectomy is a safe and effective way to secure the appendicular stump as well as being cost effective. In addition to the reduced operating time, this results in significant cost saving.

P35

ROBOTIC APPROACH TO LOW RECTAL CANCER MAKING LAR POSSIBLE

Presenter: Mr M Mathur
Author(s): Mr M Mathur, Mr C Selvasekar
Institution: The Christie NHS Foundation Trust, Manchester, United Kingdom

Aims: Is to show how robotic as an instrument can help in a proper dissection of a low rectal cancer and can avoid stoma.

Methods: 55year old female patient who was referred for a low rectal cancer post chemo radiotherapy, she was offered APER but was reluctant for the same. After the preoperative assessment and Multi-disciplinary discussion she was posted for Robotic LAR/ APER.

Results: After proper consent was taken regarding she may land up with an end colostomy patient was taken to the theatres and because of the meticulous dissection and vision through Robotic as an instrument she underwent Robotic LAR.

Conclusion: Patient was discharged on post-operative day 5, with no complications and is doing well.

Key statement: If handled by a trained surgeon Robotics can give an extra edge over other approaches for Low Rectal Cancers.

P36

CO-RELATION OF LOW INTRA-ABDOMINAL PRESSURE WITH INFLAMMATORY RESPONSE IN LAPAROSCOPIC COLORECTAL SURGERY

Presenter: Ms S Ahmed
Author(s): Ms S Ahmed, Mr N Cirocchi, Mr F Younis, Mr S Gurjar, Mr J Sagar
Institution: Luton and Dunstable University Hospital NHS Foundation Trust, Luton, United Kingdom

Aims: There is increasing evidence that low pressure pneumoperitoneum pressure has reduced the morbidity in the laparoscopic cholecystectomy. The aim of this study is to analyse co-relation between use of low intra-abdominal pressure and inflammatory response in colorectal surgery and its potential possible impact on early recovery and reduced hospital stay.

Methods: All patients who underwent elective laparoscopic colorectal resection from Jan to Dec 2020 were included irrespective of gender, race and nature of pathology. These patients had serial c-reactive protein in their post-operative period as a marker of inflammation. Microsoft Excel was used to collect the data and analyse the co-relation.

Results: Out of 86 patients, 36.5% of patient underwent colorectal resection with an intra-abdominal pressure of less than 12 mmHg. The mean pressure of intra-abdominal pressure was 10.1+1.4. The inflammatory response found on 1st POD was mean of 78.3+67(range 12-347) and 3rd POD was 121+94 and a decrease in LOS.

Conclusion: Our results found that low intra-abdominal pressure in laparoscopic colorectal resection reduces the inflammatory response in the post-operative period with early recovery and hence decrease in length of stay in the hospital and has a significant impact on the CRP level of minimum 12 in the 1st POD.

Key statement: There is limited evidence that shows the co-relation of the intra-abdominal pressure in laparoscopic colorectal resection with the inflammatory response in the post-operative period that in turn can delay the recovery period. It will be valuable if the low insufflation pressure could be incorporated in the enhance recovery programme.

P37

CAN CROSS-SECTIONAL IMAGING OF THE ABDOMEN AND PELVIS ACCURATELY PREDICT THE REQUIREMENT FOR LAPAROTOMY IN PATIENTS WITH ACUTE MESENTERIC ISCHAEMIA?

Presenter: Mr JCK Ng
Author(s): Mr JCK Ng[1], Dr M Hennessy[2], Mr K Hussey[3]
Institution: [1]Nottingham University Hospitals, United Kingdom, [2]Department of Interventional Radiology, Queen Elizabeth University Hospital, Glasgow, United Kingdom
[3]Department of Vascular Surgery, Queen Elizabeth University Hospital, Glasgow, United Kingdom

Aims: The diagnosis of acute mesenteric ischaemia (AMI) is made from clinical assessment combined with CT of the abdomen and pelvis. The ability to predict a requirement for tissue resection from CT has not been fully defined. We have explored this in a series of patients presenting with AMI.

Methods: This was a retrospective review of patient who had interventions performed for AMI. The index CT was re-reviewed by a radiologist, who was blinded to the findings at laparotomy and an opinion offered on each CT for the requirement of tissue resection.

Results: There were 129 interventions performed for AMI over the study period. No specific radiological variable was consistently reported. The presence of bowel wall thinning, hypo attenuation or portal venous gas (independently) were associated with a correct prediction for the requirement for tissue resection.

Conclusion: Multiple radiological signs are associated with AMI, but none in isolation appears to accurately predict the requirement for tissue resection.

Key statement: In the absence of CT being able to accurately predict a requirement for tissue resection in patients presenting with AMI, a policy of aggressive and early laparotomy should be considered if salvage surgery is considered appropriate.

P38

EMERGENCY APPENDICECTOMY DURING THE TWO WAVES OF COVID-19 PANDEMIC A SINGLE UK CENTRE EXPERIENCE

Presenter: Dr N Ghassemi
Author(s): Dr N Ghassemi, Mrs PRI Vedamanickam, Dr B Kulendrarajah
Dr A Boulbadaoui, Mr CVN Cheruvu
Institution: University Hospitals of North Midlands NHS Trust, Stoke-on-Trent, United Kingdom

Aims: With the spread of Covid-19, many hospitals halted surgeries due to a shortage of beds and lack of appropriate guidelines on safety in performing operations. This study focuses on a single centre experience on the outcomes of the emergency appendicectomies performed during the 2nd wave of Covid-19 in the UK.

Methods: The data collected from 138 patients that had undergone emergency appendicectomies between 01/Nov/20-28/Feb/21 was compared with 132 patients from the first wave of Covid-19 (01/03/20-05/06/20) and 206 patients from a similar non-Covid period in 2019. The criteria analysed included; patient demographics, presenting symptoms, pre-operative status, surgical intervention, complications, and outcomes.

Results: Demographics and ASA grades were statistically similar. The post-operative complications (intra-abdominal collection 2.9% vs 4.5%, surgical site infections 1.5% vs 6.9%) and the length of stay (LOS) were significantly lower in the second wave compared to the first wave of Covid-19 cohort (3.4 vs 5.2 days) and the control group.

Conclusion: The results of this study reveals that emergency appendicectomies can be safely performed during the pandemic. Significantly reduced LOS during the second wave of Covid-19 in comparison to the first wave is likely multifactorial; trust-wide policy of increased emergency operative lists, earlier senior consultant decision-making, and early patient discharge post-operatively.

Key statement: Based on this study, we believe comprehensive protocols and strict adherence compatible with Covid-19 safety criteria are designed and implemented by the surgical teams for theatres and surgical wards; emergency appendicectomies can be safely performed during the Covid-19 pandemic, with good outcomes for the patients.

P39

MANAGEMENT OF RIGHT ILIAC FOSSA PAIN DURING COVID PANDEMIC A 1 YEAR FOLLOW UP

Presenter: Ms N Saiyara
Author(s): Ms N Saiyara, Ms G Othman, Mr WY Chung, Mr S Sangal, Mr S Khan
Institution: Leicester General Hospital, Leicester, United Kingdom

Aims: Long term follow-up of management of Right Iliac Fossa pain during COVID pandemic.

Methods: RIF pain is a common cause of emergency admissions. During the Covid-19 pandemic, non-operative management for acute appendicitis was implemented in the UK. There are several studies to compare the short-term outcome of this changed guideline but long term follow up is not much available.

Results: 170 patients were referred with RIF pain, of which107 had acute appendicitis (US/CT). 61 were treated conservatively, 44 underwent surgery, 2 had radiological intervention. 24/61 were readmitted with complications. 12/24 underwent appendectomy and 12/24 were treated conservatively with no further recurrence within 1 year.

Conclusion: Usage of antibiotics can be a safe alternative to emergency appendectomy in a pandemic situation. However, looking at the rate of recurrence and subsequent surgery, appendectomy remains the gold standard for the treatment of acute appendicitis.

Key statement: Appendectomy remains the gold standard for the treatment of acute appendicitis.

P40

THEORETICAL EVALUATION OF SIMULATION BASED LAPAROSCOPIC LEARNING IN GENERAL SURGERY

Presenter: Dr M Badawi
Author(s): Dr M Badawi[1], Miss A Sharmin[2], Mr A Shalaby[1], Miss A Shamardal[3], Mr K Noureldin[4]
Institution: [1]Conquest Hospital, Hastings, United Kingdom
[2]John Radcliffe Hospital, Oxford, United Kingdom
[3]Kettering General Hospital, United Kingdom
[4]Prince Charles Hospital, South Wales, United Kingdom

Aims: The future of surgical training and innovation will require a combination of simulation and operative exposure in theatres. With the current climate of reduced exposure for theatres, this has made the traditional apprenticeship model obsolete. Our training was severely affected by COVID; reduced numbers of surgical procedures across NHS hospitals.

Methods: We will discuss the theory, safety and impact of relying on SBL courses to fill the gaps in our learning. Given the complexity of skills learnt, it was justified to measure learning with end of course assessment alone, although this would leave non-technical skills unassessed in depth.

Results: Clinical exposure alone will not be able to train healthcare professionals to their highest proficiency. Simulation based learning (SBL) is one educational design that is backed up by Transformational learning theory. SBL will allow learners to go through different phases of TLT.

Conclusion: Literature suggests several andragological theories to support SBL namely the experimental learning theory by Kolb and TLT of constructivism. In high fidelity simulation training, Issenberg et al plotted 12 concepts to facilitate learning which are fulfilled in laparoscopic simulation courses.

Key statement: SBL has provided a good substitute to fill learning gaps but it still remains difficult to measure the efficacy of transferring the learnt capabilities into practice and to standardize this across learners.

P41

A SINGLE SURGEON EXPERIENCE OF TOTAL EXTRAPERITONEAL INGUINAL HERNIA REPAIR IN A DISTRICT GENERAL HOSPITAL

Presenter: Mr M Azam
Author(s): Mr M Azam, Mr A El-Askalani, Mr S Jmor
Institution: Southport and Ormskirk NHS Trust, Southport, United Kingdom

Aims: Recurrence of inguinal hernia is a feared complication of both laparoscopic and open hernia surgery. The aim of this study was to evaluate a single surgeon's experience by comparing the recurrence rate of total extraperitoneal (TEP) repair with the standards set out by NICE guidelines.

Methods: This was a retrospective review of a prospectively collected and maintained data on elective TEP hernia repairs between 2007 to 2019. Recurrence of the hernia was assessed as the primary endpoint whereas chronic pain, the incidence of postoperative infection and seroma/haematoma after hernia surgery were analysed as secondary endpoints.

Results: A total of 827 patients records were retrieved from the electronic database system. Our results showed a recurrence rate of 0.5% with acceptable incidence of chronic pain and wound related complication compliant with the NICE guidance.

Conclusion: A TEP repair for both primary and recurrent inguinal hernia has a minimal recurrence rate when performed by the specialists in this area giving full attention to the details.

Key statement: This study shows the recurrence and complications of Total Extraperitoneal inguinal hernia repair in a District General Hospital performed by a single surgeon without using any balloon for creating the space. The results are compliant with the NICE guidelines.

P42

IS ELECTIVE LAPAROSCOPIC SPLENECTOMY THE GOLD STANDARD IN 21ST CENTURY?

Presenter: Mr G Mohamed
Author(s): Mr G Mohamed, Dr R Fernandes, Dr N Ghassemi, Mr H Salgaonkar, Mr C Cheruvu
Institution: University Hospital North Midlands, Stoke on Trent, United Kingdom

Aims: Elective Splenectomy is performed for both benign & malignant conditions. This can be performed by conventional open surgery or at laparoscopy. The aim of this study was to review the clinical profile, indications and outcomes in patient undergoing Laparoscopic elective splenectomy at a tertiary care centre.

Methods: This is an observational study of Elective splenectomies performed from 2007 to 2020 on 54 patients, whilst excluding splenic removal for trauma, along with other organ removal or iatrogenic injuries. The data on demographics, presenting symptoms, indications, investigations, surgical management, postoperative outcomes & Length of Postop stay (LOS) status were analysed.

Results: The median age was 52 years with 63% females. Commonest indications for Splenectomy were ITP, Haemolytic Anaemias, Leukaemia's & Lymphomas. Laparoscopic Splenectomy performed in 94.5%, whilst 5.5% were open with 6% conversions with median LOS of 3 days,10.9% morbidity, which included post-operative bleeding, wound infection, intra-abdominal collections and urinary retention.

Conclusion: Laparoscopic Splenectomy is favoured for the diagnosis and treatment of haematological disorders, benign & malignant conditions whilst open surgery benefits in a few. In experienced hands elective splenectomy can be safely performed with low conversion rates with reduced hospital stay and low morbidity, which is beneficial to patients & the hospital.

Key statement: Laparoscopic approach is safe for elective splenectomy, with very low morbidity. A multidisciplinary approach is crucial in patients undergoing splenectomy as these patients are seriously ill with significant haematological problems. Ideally a Joint pre-operative preparation & peri-operative care with a team of haematologists, anaesthesiologists and surgeons yield excellent results.

P43

SYMPTOMATIC JEJUNAL LIPOMA; ROLE OF ON TABLE ENTEROSCOPY IN THE ERA OF NON-INVASIVE INVESTIGATION

Presenter: Dr T Rahim
Author(s): Dr T Rahim, Mr MO Karim, Mr R Qazi, Mr L Wong
Institution: University Hospital Coventry and Warwickshire, Coventry, United Kingdom

Aims: Case report and literature search highlighting the role of on table enteroscopy in diagnosing and managing a small symptomatic jejunal lipoma with obscure bleeding.

Methods: A 53-year-old woman with a medical history of end stage renal failure presented with marked anaemia secondary to severe gastrointestinal bleeding from a small intestine lipoma requiring thirty units of blood transfusion. Multiple investigations including CT scan, MRI scan and push enteroscopy failed to diagnose the lesion accurately.

Results: The patient underwent an exploratory laparotomy and on table enteroscopy. A small lipomatous lesion was noted in mid-jejunum and small bowel resection performed without complications. Histopathology confirmed a 26 mm small bowel Lipoma with ulceration in the centre. Patient remained stable and asymptomatic at 12 weeks follow-up.

Conclusion: On table enteroscopy is safe and effective in diagnosing and managing symptomatic small bowel lesion like lipoma, when other modalities failed to diagnose the lesion accurately.

Key statement: On table enteroscopy has its role in current surgical practice.

P44

COMPLICATIONS OF EVAR AND ITS EFFECT ON LONG TERM SURVIVAL IN PATIENTS WHO HAD REINTERVENTION - 10 YEAR SINGLE CENTRE STUDY

Presenter: Dr MH Jamshed
Author(s): Mr MO Karim[1], Dr MH Jamshed[2], Mr M Iqbal[2], Mr S Jones[2]
Institution: [1]University Hospital Coventry and Warwickshire, Coventry, United Kingdom
[2]Royal Shrewsbury Hospital, Shrewsbury, United Kingdom

Aims: The purpose of this study was to describe the incidence and outcome of complications requiring reintervention following EVAR, visible on CT and US scan surveillance over a period of 10-years and its long term outcome.

Methods: Patients with AAA underwent EVAR from Oct 2009 till Oct 2019 at Royal Shrewsbury hospital, UK were included in the study. A total of 279 patients met the eligibility criteria. Patient and aneurysm characteristics, follow-up, and secondary intervention data were accumulated from patient's medical records and vascular database.

Results: 279 patients included in the study. 89 graft related endo-leaks identified. 56 complications required reintervention, 39 treated with endo-vascular procedure (graft extension, relining of limb, embolectomy, embolization, angioplasty) and 17 managed with surgical procedure (fem-fem cross over, Amputation, graft infection/removal). 13.9 % of patient underwent EVAR related complications needed reintervention.

Conclusion: 10-year single-centre follow up study of EVAR revealed that many patients treated with EVAR had a radiological visible complication, mainly in the initial stages of the follow up period. Complication requiring reintervention was not associated to increased mortality.

Key statement: EVAR Complication requiring reintervention was not associated to increased mortality.

P45

INCISIONAL HERNIA RATES AFTER LAPAROSCOPIC RIGHT HEMICOLECTOMY

Presenter: Miss JR Tan
Author(s): Miss JR Tan, Dr E Scholes-Pearson, Mr M Al-Rashedy, Mr N Pranesh
Institution: Warrington and Halton Hospitals NHS Foundation Trust, Liverpool, United Kingdom

Aims: Laparoscopic right hemicolectomy (LRH) has become increasingly more common in colon cancer surgery. Development of incisional hernia (IH) at specimen extraction site is a common complication and can result in patient morbidity. The aim was to review the rates of IH in patients undergoing LRH in a single centre.

Methods: All patients who underwent elective LRH from year 2016 to 2018 were retrospectively reviewed. 37 patients were included. Extracorporeal anastomosis was performed in all patients. Specimens were extracted through midline incisions. Clinical notes and CT scans were reviewed to identify patients who developed IH in 3 years.

Results: Median age was 72, 62.2% was male and median length of stay was 9 days. Overall IH rate at the specimen extraction site was 21.6%. There were no significant differences in age, cardiovascular disease, diabetes, steroid use, ASA III/IV, smoking, SSI and BMI between patients with and without IH.

Conclusion: The rate of IH at 3 years after LRH in our series was 21.6%, similar to that of midline laparotomy in other literature. None of the risk factors was significant for development of IH in our series.

Key statement: The rate of IH at 3 years after LRH in our series was 21.6%, similar to that of midline laparotomy in other literature. Further studies should focus on alternative extraction site incision techniques, i.e. muscle-sparing transverse incision or Pfannenstiel incision, in reducing the rate of IH.

P46

EXPERTS VS. MACHINE – PREDICTION OF POSTOPERATIVE MORBIDITY IN LIVER SURGERY COMPARING MACHINE LEARNING TO STANDARD REGRESSION MODEL

Presenter: Ms RD Staiger MD, PhD
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Mr D Kozbur[5] PhD, Mr PA Clavien[1] MD, PhD
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[3]Department of Medical Oncology and Hematology, University Hospital Zurich, Switzerland
[4]Department of Epidemiology, Epidemiology, Biostatistics and Prevention Institute
University of Zurich, Switzerland, [5]Department of Economics, University of Zurich, Switzerland

Aims: To develop and compare performance of conventional expert-designed prediction models with machine learning algorithms in estimating postoperative morbidity in hepatic surgery. A precise postoperative morbidity prediction tool would facilitate shared decision making regarding surgical/conservative management. Machine learning has been introduced in clinical diagnostics; relevance for surgical outcome prediction remains unknown.

Methods: Single tertiary center study. Preoperative parameters and postoperative complications were retrieved from elective hepatic surgery patients between 2008-2018. Three months morbidity was determined by Comprehensive Complication Index (CCI®). Expert models were designed by regression-based algorithms, machine learning models by neural network, random forest, and forward selection. Temporal validation was performed.

Results: Assessed were 768 patients (594 training,174 validation set) including 22.1% benign lesions. Expert models' mean differences observed vs. predicted values were close to 0 (CI-40 to 40) with variance up to 75 CCI®points. Machine learning models' observed vs. predicted mean difference were between 0-5 (CI-50 to 50); 60 CCI®points variance.

Conclusion: Great variance was found in both models between the predicted morbidity and the observed outcome. Variance in severity of preoperative risk factors and not anticipated perioperative events may be the cause.

Key statement: Machine learning was not superior to regular prediction models in estimating postoperative overall morbidity. Preoperative risk factors most probable are only partially responsible for patients' postoperative outcome; the impact of the perioperative course may be the cause. Accurate postoperative risk prediction for overall morbidity remains a challenge in liver surgery.

P47

SHOULD WE BE PERFORMING LAPAROSCOPIC/ROBOTIC LATERAL LYMPH NODE DISSECTION (LLND) ROUTINELY?

Presenter: Miss J Tan
Author(s): Miss J Tan[1], Miss S Singh[2], Miss A Lord[1], Mr M Abulafi[3], Professor G Brown[1]
Institution: [1]Royal Marsden Hospital, Sutton, United Kingdom
[2]Epsom and St Heliers NHS Trust, Epsom, United Kingdom
[3]Croydon University Hospital, United Kingdom

Aims: To assess the effect of enlarged/involved pelvic side wall nodes (PSW) left in situ in relation to oncological outcomes (local recurrence and distant recurrence) and overall survival.

Methods: A retrospective case note review of all patients treated for rectal cancer between 2013 to 2019. All baseline MRI scans were reviewed for presence of PSW nodes. Outcomes measured were local recurrence (LR), distant recurrence (DR) and overall survival (OS).

Results: 321 patients were identified (median follow up 39 months). 42 had enlarged PSW nodes and 15 had PSW tumour deposits (TD). Overall LR rate was 5.30% (17/321). There is no significant difference in LR between patients with no PSW nodes, enlarged PSW nodes or PSW TD (p= .096).

Conclusion: Enlarged PSW nodes are not associated with increased LR rates. LR rates in the post-TME era are low and most do not occur in the pelvic side wall. Our results do not support the routine use of LLND based upon size of lymph nodes.

Key statement: There is increasing interest in LLND and recent conferences have featured workshops in laparoscopic/robotic LLND. Whilst a recent study demonstrated alarming LR rates with PSW nodes >7mm has advocated for more routine use of LLND, our data does not support this.

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The Mid Yorkshire Hospitals NHS Trust, Wakefield, United Kingdom

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Ms S Virupaksha[1,2], Mr M Bhandari[1], Mr SV Thulasiraman[3]
Professor Y Viswanath[3], Mr G Bussa[1]
[1]North Tees University Hospital, Stockton, United Kingdom
[2]Teesside University, Middlesbrough United Kingdom
[3]James Cook University Hospital, Middlesbrough, United Kingdom

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Miss J Ma, Mr C Swaminthathan, Dr S Osifo, Ms H Barrett
Royal Sussex County Hospital, Brighton, United Kingdom

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Dr J Latif, Miss C Hope, Mr I Bhatti, Mr A Awan
University Hospitals of Derby & Burton, Derby, United Kingdom

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Mr M Bhandari[1,2], Ms S Virupaksha[1], Mr M Rao[1], Mr G Bussa[1]
Professor YKS Viswanath[3,2]
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STEER Collaborative, Cambridge, United Kingdom

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Miss A Tutton[1], Miss E Blagrove[1], Mr A Mostada[2]
Mr M Tutton[2], Miss S Sharif[3]
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[2]Colchester Hospital, United Kingdom
[3]Royal London Hospital, United Kingdom

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[2]UCLH, London, United Kingdom
[3]Pinderfield General Hospital, Wakefield, United Kingdom

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[1]University Hospital Cologne, Germany, [2]University of Cologne, Germany
[3]Olympus Europe SE & Co. KG, Hamburg, Germany
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[2]Portsmouth Hospitals University NHS Trust, United Kingdom
[3]University Hospital Dorset, Poole, United Kingdom
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Mr A Botros[1], Mr L Kumar[1], Mr K Tsimogiannis[1,2]
Mr S Stefan[1], Professor J Khan[1,3]
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Mr M Fahim[1], Mr A James[2], Ms H Gandhi[2]
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East Surrey Hospital, Redhill, United Kingdom

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Mr M Fahim, Dr E Hussain, Dr M Futcher, Mr S Monkhouse
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Mr A Ammar, Dr A Saab, Dr E Rostand
The Mid Yorkshire Hospitals NHS Trust, Wakefield, United Kingdom

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Mr A Elzaafrany, Mr M Fahim, Mr A Tawfik, Mr A Day
East Surrey Hospital, Redhill, United Kingdom

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Royal Hampshire County Hospital, Winchester, United Kingdom

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Portsmouth Hospitals University NHS Trust, Portsmouth, United Kingdom

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Ms S Schaffer[1], Mr P O'Neill[1], Mr J Coombs[1]
Mr T Payne[2], Mr M Abouelazayem[3]
[1]St George's, University of London, United Kingdom
[2]St George's Hospital, London, United Kingdom
[3]Royal Free Hospital, London, United Kingdom

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Dr M Chacon Garcia, Dr T Theivendrampillai, Mr A Frampton
Royal Surrey County Hospital, Guildford, United Kingdom

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Mr JCK Ng[1], Mr Z Khanzada[2], Dr M Lee[1]
Mr A El-Sharkawy[2], Mr B Bharathan[1]
[1]Nottingham University Hospitals, Nottingham, United Kingdom
[2]University Hospitals of Derby and Burton, Derby, United Kingdom

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Mr M Mathur, Mr C Selvasekar
The Christie NHS Foundation Trust, Manchester, United Kingdom

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Ms S Ahmed, Mr N Cirocchi, Mr F Younis, Mr S Gurjar, Mr J Sagar
Luton and Dunstable University Hospital NHS Foundation Trust
Luton, United Kingdom

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Mr JCK Ng[1], Dr M Hennessy[2], Mr K Hussey[3]
[1]Nottingham University Hospitals, United Kingdom
[2]Department of Interventional Radiology, Queen Elizabeth University Hospital, Glasgow, United Kingdom
[3]Department of Vascular Surgery, Queen Elizabeth University Hospital Glasgow, United Kingdom

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Dr N Ghassemi, Mrs PRI Vedamanickam, Dr B Kulendrarajah
Dr A Boulbadaoui, Mr CVN Cheruvu
University Hospitals of North Midlands NHS Trust
Stoke-on-Trent, United Kingdom

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Ms N Saiyara, Ms G Othman, Mr WY Chung, Mr S Sangal, Mr S Khan
Leicester General Hospital, Leicester, United Kingdom

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Dr M Badawi[1], Miss A Sharmin[2], Mr A Shalaby[1]
Miss A Shamardal[3], Mr K Noureldin[4]
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[2]John Radcliffe Hospital, Oxford, United Kingdom
[3]Kettering General Hospital, United Kingdom
[4]Prince Charles Hospital, South Wales, United Kingdom

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Mr M Azam, Mr A El-Askalani, Mr S Jmor
Southport and Ormskirk NHS Trust, Southport, United Kingdom

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Mr G Mohamed, Dr R Fernandes, Dr N Ghassemi
Mr H Salgaonkar, Mr C Cheruvu
University Hospital North Midlands, Stoke on Trent, United Kingdom

P43 SYMPTOMATIC JEJUNAL LIPOMA; ROLE OF ON TABLE ENTEROSCOPY IN THE ERA OF NON-INVASIVE INVESTIGATION
Dr T Rahim, Mr MO Karim, Mr R Qazi, Mr L Wong
University Hospital Coventry and Warwickshire
Coventry, United Kingdom

P44 COMPLICATIONS OF EVAR AND ITS EFFECT ON LONG TERM SURVIVAL IN PATIENTS WHO HAD REINTERVENTION 10 YEAR SINGLE CENTRE STUDY
Mr MO Karim[1], Dr MH Jamshed[2], Mr M Iqbal[2], Mr S Jones[2]
[1]University Hospital Coventry and Warwickshire, Coventry, United Kingdom
[2]Royal Shrewsbury Hospital, Shrewsbury, United Kingdom

P45 INCISIONAL HERNIA RATES AFTER LAPAROSCOPIC RIGHT HEMICOLECTOMY
Miss JR Tan, Dr E Scholes-Pearson, Mr M Al-Rashedy, Mr N Pranesh
Warrington and Halton Hospitals NHS Foundation Trust
Liverpool, United Kingdom

P46 EXPERTS VS. MACHINE - PREDICTION OF POSTOPERATIVE MORBIDITY IN LIVER SURGERY COMPARING MACHINE LEARNING TO STANDARD REGRESSION MODEL
Ms RD Staiger[1,2] MD, PhD, Mr T Mehra[3] MD, Ms SR Haile[4] PhD
Mr D Kozbur[5] PhD, Mr PA Clavien[1] MD, PhD
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P47 SHOULD WE BE PERFORMING LAPAROSCOPIC/ROBOTIC LATERAL LYMPH NODE DISSECTION (LLND) ROUTINELY?
Miss J Tan[1], Miss S Singh[2], Miss A Lord[1], Mr M Abulafi[3], Professor G Brown[1]
[1]Royal Marsden Hospital, Sutton, United Kingdom
[2]Epsom and St Heliers NHS Trust, Epsom, United Kingdom
[3]Croydon University Hospital, United Kingdom

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