**Methods:** We compared all colonoscopy procedures performed by joint advisory group (JAG) on GI endoscopy approved surgical and gastroenterology endoscopists during the period January 2008 to June 2013.

**Results:** A total of 6718 colonoscopies were performed by 6 gastroenterology and 8 surgeon endoscopists with comparable completion rates. The surgeons performed twice more colonoscopies (n=6611) with statistically significant difference in patient’s age (62.3 years vs. 57.6 years, p <0.001). The surgeons also performed more therapeutic procedures (1529 vs. 442, p <0.001) with higher polyp excision rates (p 0.001). During the procedures, surgeons used less sedation (mean dose: Fentanyl dose 55.31 mcg vs. 61.53 mcgs, p <0.001; Midazolam 2.6mg vs. 2.7mg, p <0.001) but high dose of Buscopan (9mg vs. 1.5 mg, p <0.001) resulting in overall less patient discomfort levels (p 0.001).

**Conclusions:** The study demonstrates a high volume of diagnostic and therapeutic colonoscopy service provided by surgeons. This study highlights the need for incorporation of endoscopy training into surgical curriculum.

**1252: STAPLED ANOPEXY: AN EFFECTIVE TREATMENT FOR SYMPTOMATIC HAEMORRHOIDAL DISEASE – A DISTRICT GENERAL HOSPITAL EXPERIENCE**

Bikesh Dongol*, Johnathan Porter, Aishiq Mohamad, Karim Ahmad. Tameside General Hospital, Department of General Surgery, Ashton-under-Lyne, Manchester, UK.

**Introduction:** A prospective review of our experience and outcomes in a series of 74 consecutive patients, who underwent stapled anopexy, between 2011-2013.

**Method:** Data was collected prospectively. Clinical information was obtained from all patients. Patient demographics, symptoms, indications for surgery and short-term outcomes were evaluated.

**Results:** 74 patients with symptomatic haemorrhoidal disease underwent stapled anopexy, with a male: female ratio of 35:39, mean age of 50 (range 25-85). Pre-operative symptoms included rectal bleeding (84%), perianal irritation (43%), prolapsing haemorrhoids (30%) and skin tags (7%). Surgery was performed as a day case procedure. There were no intra-operative complications. Post-operatively, minor bleeding or discomfort was the most common complication. No faecal incontinence was noted. 70% of patients were discharged following 1 routine outpatient appointment, increasing to 90% after 3 appointments. Of the remaining 10% (8 patients); 4 had underlying obstructive defecation syndrome, 1 had urgency that settled after 4 months, 1 had delayed wound healing and 2 had painful defecation of which 1 required excision of a painful suture neuroma.

**Conclusions:** Multiple treatment modalities exist for symptomatic haemorrhoidal disease. Our short-term results demonstrate stapled anopexy to be an effective treatment with low associated morbidity and a high level of patient satisfaction.

**1259: ASSESSING THE MOST EFFECTIVE UPPER LIMIT OF NORMAL FOR CEA IN THE FOLLOW UP OF CURATIVE COLORECTAL CANCER RESCTIONS**

Jasmine Poonian*, Timothy Bullen, James Arthur. Aintree University Hospital Trust, Liverpool, UK.

**Introduction:** Carcino-Embryonic Antigen (CEA) is a marker for recurrent disease following curative resections of colorectal cancer. Not all colorectal tumours express CEA and it may be raised for other reasons. A raised CEA requires investigation but slight rises in CEA frequently fail to demonstrate recurrent disease and carry risks and promote anxiety. We reviewed CEA levels at their first check post-curative resection and correlated this with recurrence.

**Methods:** Retrospective case-note review of 418 patients having curative resections between 4/9/08 and 24/12/12.

**Results:** 130 patients developed recurrent disease (first CEA range was 0.2 – 11563ng/ml, median 9.2). 288 patients had no recurrent disease (first CEA range 0.5- 112.9ng/ml, median 2.6). Using an upper limit of normal as 3.5ng/ml for CEA the sensitivity and specificity for recurrent disease is 55% and 75% however at 4.0ng/ml it is 52% and 83%.

**Conclusions:** Raising the upper limit of normal is effective in reducing the number of disease-free patients having needless investigations for recurrence (95% of patients) however the cost of missing three recurrent carcinomas is too high. The best value for the upper limit of normal of CEA is 3.5ng/ml.

**1298: ERECTILE DYSFUNCTION AND FECAL INCONTINENCE AFTER PELVIC RECTAL CANCER SURGERY**

Wee Sing Ng, Albert WT. Ngu*, Mohammad Tabaqchali, Talvinder Gill, Anil Agarwal, Victor Palit, Dharmendra Garg. University Hospital of North Tees, Stockton-On-Tees, UK.

**Introduction:** Erectile dysfunction (ED) and faecal incontinence (FI) can affect 75% of men after pelvic rectal cancer surgery. There is paucity of data, especially ED as what is accessible is extrapolated from prostate cancer studies. The aim was to gauge trust practice and obtain data for prospective questionnaire planning.

**Methods:** A retrospective questionnaire (Wexner score and International Index of Erectile dysfunction (IIEF-5)) was sent to 71 male patients from January 2011 to December 2012.

**Results:** Response rate was 47.9%. Patients who felt inappropriately counselled about ED risk post-operatively was 47%. Of these, 68.8% would have preferred a discussion regarding ED pre-operatively. On the IIEF-5, 31.2% patients had moderate ED, 12.5% had mild to moderate ED, 25% had mild ED whilst 31.2% had no ED. In contrast, 35.2% felt inappropriately counselled about FI risk post-operatively and 83.3% would have preferred to have had this discussion. Prior to surgery, 58.8% never suffered from FI. After surgery, 15.2% patients scored 0 or more on the FI score (0 no incontinence and 20 severe incontinence).

**Conclusions:** ED and FI are issues that need to be addressed more comprehensively and patients should be counselled regarding these risks in a timely manner whilst dealing with the diagnosis of cancer.

**1357: THE INDIVIDUAL SURGEON’S PERFORMANCE: 10 YEARS OF LAPAROSCOPIC COLORECTAL SURGERY**

Sina Hossaini*, Balamurali Bharathan, Charles Maxwell-Armstrong. Queen's Medical Centre, Nottingham, UK.

**Introduction:** To evaluate individual surgeon performance for laparoscopic colorectal operations from UK national laparoscopic training centre.

**Methods:** Data analysis was conducted from prospectively validated colorectal database for the individual consultant surgeon from July 2003.

**Results:** 325 patients (172 male, 153 female) of mean age 65.9 years and mean BMI of 26.5. The majority were ASA grade 2 (57.5%). 102 procedures were right-sided, 65 left-sided, 15 involving right and left, and 143 rectal operations. 213 were for malignancy (65.5%). The commonest stage was Duke’s B and 92% were of curative intent with mean lymph node harvest of 16.2. Trainee was the primary surgeon in 53%. Mean postoperative length of stay was 6.4 (1-115) days. Thirty days morbidity and hospital mortality were 24.6% (anastomotic leak rate 2.2%), and 1.2% respectively; readmission and reoperation rates were 9.2% and 4.6%. Conversion rate to open was 12%; incisional hernia rate was 18.2%. 3-year local and distant disease recurrence rates were 9.2% and 19.3% respectively. Five-year survival for cancer resections was 74.5%.

**Conclusions:** The results of this study reinforce the value of postoperative colorectal surgical training. Laparoscopic trainee can be achieved with good clinical outcomes despite the pressures for disclosure of individual surgeon level data.

**1364: THE EFFECT OF MOVIPREP ADMINISTRATION TIMING ON THE ADEQUACY OF BOWEL PREPARATION FOR COLONOSCOPY**


**Introduction:** Colonoscopy is limited by a small but significant incidence of missed lesions due in part to inadequate bowel preparation. At our endoscopy unit, bowel preparation (Moviprep) is administered 12-16 hr prior to endoscopy for morning lists but only 6-9 hr before afternoon lists. We aimed to investigate the effect of moviprep administration timing on the adequacy of bowel preparation.

**Methods:** Data was collected for colonoscopy patients over two months. Adequacy of bowel preparation was compared between morning and afternoon lists. The effect of various independent factors on the adequacy of bowel prep including age, gender and operator were also tested.

**Results:** 199 patients were included. 102 patients were scheduled on a morning list. Within this group, the incidence of good, satisfactory and poor bowel preparation respectively was 23.5%, 50% and 26.5% compared to 57.7%, 24.8% and 17.5% on afternoon lists (P<0.0001). The adequacy of
bowel preparation was also significantly affected by gender but not by operator or age group.

**Conclusions:** The adequacy of bowel preparation is affected by the timing of bowel prep administration. Bowel preparation regimes for morning lists may need to be adjusted to reduce the risk of missed lesions in this group.

### Endocrine surgery

**0150: HISTOPATHOLOGICAL CHARACTERISTICS OF ADRENAL INCIDENITALOMAS IN A HIGH VOLUME UNIT, A 7-YEAR EXPERIENCE**

Michael Feretis, Philippa Orchard, Taw Chin Cheong, Chas Ubbi. Nottingham University Hospitals, Nottingham, UK.

**Introduction:** With increased use of sophisticated abdominal imaging incidental adrenal masses have become a commoner finding. The aim of this study was to evaluate the histopathological characteristics of such lesions following adrenalectomy in a tertiary referral centre.

**Methods:** Data on 77 patients (46 female) who underwent an adrenalectomy in our institution between January 2006- October 2013 were collected retrospectively from our institution’s electronic patient database. Data was collected on patient demographics, imaging report, biochemistry findings, operative details and specimen histology.

**Results:** 18/77 patients (23.4%) with a median age of 33.5 years (range 23–44) underwent an adrenalectomy for incidentaloma. 13/18 patients (72.2%) underwent the procedure laparoscopically. 14/18 lesions (77.8%) were diagnosed by CT; 3/18 (16.7%) by ultrasound and 1/18 (5.5%) by MRI. On histological analysis 8/18 lesions (44.4%) were adrenal adenomas; 5/18 (27.8%) were benign cysts; 2/18 (11.1%) were phaeochromocytomas; 1/18 (5.5%) was a myelolipoma; 1/18 (5.5%) was a case of adrenal hyperplasia and there was a sole case of primary adrenal malignancy (adenocortical carcinoma).

**Conclusions:** In our experience adrenal incidentalomas are benign in nature; however, early specialist referral along with detailed radiological and biochemical assessment should be routinely performed for such lesions.

**0409: IS SUB-TOTAL PARATHYROIDECTOMY RENAL PROTECTIVE COMPARED TO TOTAL PARATHYROIDECTOMY IN RENAL TRANSPLANT PATIENTS? A COMPARATIVE STUDY**

M. Crockett, P.C. Munipalle, A.G. Edwards, J.D. Morgan. Southmead Hospital, Bristol, UK.

**Introduction:** Sub-total parathyroidectomy (STP) is considered renal protective in comparison with total parathyroidectomy (TP) in renal hyperparathyroid patients, especially in renal transplant patients. We compared the effects of these two operative methods to identify if such an advantage exists.

**Methods:** The renal parathyroid patients who underwent parathyroidectomy by a single surgeon over a 10-year period after successful renal transplantation were identified from a prospectively maintained database. 3½ glands were removed during STP. The sub groups of STP and TP were compared in terms of renal function (primary end point), bone profile and recurrent hyperparathyroidism (secondary end points).

**Results:** A total of 19 patients were included in this study (STP - 7 and TP - 12). The renal function while showing a slight reversible deterioration in the immediate post-operative period was comparable in both groups (p = 0.56). Other parameters of bone profile (Calcium, Phosphate, and Alkaline Phosphatase) also showed similar trend. However, one patient developed recurrent hyperparathyroidism in the STP group (14%).

**Conclusions:** Our study showed there is no advantage of STP over TP in post renal transplant patients. Recurrence of hyperparathyroidism is a risk with STP and this has to be taken into consideration in these precious patients.

**0844: THE EFFICACY OF DIAGNOSTIC THYROID LOBECTOMY IN PATIENTS WITH POSSIBLE THYROID CANCER AND INCONCLUSIVE CYTOLOGY ON FINE NEEDLE ASPIRATION**

Noel Aruparayil, Rachel Czajka, Charlotte French, Julia Baldwin, Mark Lansdown. Leeds Teaching Hospitals NHS Trust, Leeds, West Yorkshire, UK.

**Introduction:** To analyse the efficacy of diagnostic thyroid lobectomy in patients following inconclusive cytotology on Fine Needle Aspiration (FNA) in suspected thyroid cancer.

**Methods:** Retrospective analysis of patients with suspected thyroid cancer who underwent diagnostic thyroid lobectomy from November 2011–2013. Data collected and analysed included demographics, tumour size, pressure symptoms & outcomes of FNA. THY1, THY3 and THY4 considered inconclusive (THY2 benign, THY5 malignant). Patients divided into two groups according to lobectomy histology result – Benign & Malignant.

**Results:** 40 patients recruited. Female 32: Male 8. Median age 48.5. 35% patients with inconclusive cytology had cancer. No patient had THYS5 cytology. In Malignant group 92.8% patients had inconclusive FNA, whereas 71% had THY2. All THY4 cytology were cancer positive on final histology. Benign group FNA results were 38.4% THY1, 7.6% THY2 & 53.8% THY3. Overall 66.6% patients with THY2 on first FNA had malignancy on histology. 35.7% had pressure symptoms in malignant group & 19% in Benign group. Average tumour size 3.54 cm (1-7.8).

**Conclusions:** Consideration should be given for diagnostic thyroid lobectomy on ALL patients with inconclusive cytology on first FNA or with Benign (THY2) cytology and strong clinical suspicion of thyroid cancer.

### ENT surgery

**0099: CAN VOICE ANALYSIS BE USED TO DIAGNOSE AND MONITOR PEDIATRIC VOICE DISORDERS?**

Shilpa Ojha, Steve Matu, Catherine Ballif, Christopher Hartnick. Massachusetts Eye & Ear Infirmary, Boston, MA, USA.

**Introduction:** Diagnosis of paediatric voice disorders is based on subjective and objective measures. With normative voice data now available, we wanted to see if computer-assisted voice analysis could serve as an objective diagnostic and monitoring tool.

**Methods:** Retrospective data was collected of 200 children who were seen in our outpatient paediatric otolaryngology clinic over 5 years. These were all children who were diagnosed with either a vocal fold nodule or vocal fold cyst. Voice recordings were made in a quiet room using the "Multi-Dimensional Voice Program (MDVP)" software. The clinical variables we looked at were fundamental frequency and maximum phonation time. Each child also had fiberoptic endoscopy to confirm their diagnosis.

**Results:** There were clear differences in voice analysis, from the normative values, in children with vocal fold nodules and cysts. Maximum phonation time for children with vocal fold cysts gradually worsened with age, and was significantly greater for children with vocal fold nodules. Fundamental frequency increased in both voice disorders.

**Conclusion:** The significant variation from normative values that occurs means that this software could be used to diagnose children and monitor their response to surgical intervention.

**0237: GLOBUS PHARYNGEUS IN THE ENT OUTPATIENT CLINIC: A RETROSPECTIVE REVIEW OF 103 PATIENTS**

Gabriel Y. Cao*, Panagiotis Asimakopoulos, W. Ah-See, University of Aberdeen, Aberdeen, UK; 2Department of Otolaryngology Head & Neck Surgery, Aberdeen Royal Infirmary, UK.

**Introduction:** To estimate the incidence of globus pharyngeus in a general ENT outpatient clinic (OPC) and evaluate the appropriate use of proton pump inhibitors (PPIs) and other NHS resources.

**Methods:** Retrospective review of 103 patient case notes seen between January - February 2013 at a tertiary referral centre general ENT OPC.

**Results:** 103 out of a total of 1199 (8.6%) patients presented with globus pharyngeus and no identifiable underlying pathology. 42/103 (41%) were started on PPIs by ENT. Only 18/42 (43%) were prescribed PPIs appropriately. Only 13/42 (31%) of patients on PPIs were advised on appropriate duration of treatment. 28/103 (27%) of globus patients were referred to Speech and Language Therapy (SALT) or were given appropriate lifestyle advice. 31/103 (30%) underwent further investigations (e.g. barium swallow) and 27/103 (26%) were given further outpatient clinic follow-up.

**Conclusions:** The lack of understanding behind globus type symptoms leads to inappropriate investigations and treatment. Management of globus type symptoms should first focus on lifestyle modification and appropriate referrals to SALT due to the potential long term side effects of PPI treatment. An evidence based management protocol for the management of globus patients should be implemented.