Background: Typical current conversion rates in laparoscopic cholecystectomy (LC) reported in the literature range between 4-10%. There has been a downward trend in the conversion rates since the inception of LC but a plateau was attained over the past decade. The aim of this study is to emphasise that a further downward trend in conversion rates is achievable when LC is performed in an appropriate specialist setting.

Methods: The clinical records of all patients who underwent LC performed by one consultant Upper Gastrointestinal surgeon for symptomatic cholelithiasis between 2002 and 2008 were analysed retrospectively. End points studied included the conversion rate, operating time, hospital stay and complication rate.

Results: A total of 251 patients [Females:Males-205:46] with ASA values of 1-3 underwent LC by one consultant Upper Gastrointestinal surgeon. The median age was 47 years (IQR 33-51) and median BMI was 29.5 (IQR 26-36.5). The median operating time was 60 minutes (IQR 50-80). The median hospital stay was 1 day. Conversion to open cholecystectomy was performed in 4 patients (1.6%). Complications occurred in 7 patients (2.7%).

Conclusions: Conversion rates which are significantly lower than the literature are feasible with a low incidence of complications when performed in an appropriate specialist setting.

AUDIT OF THE BRITISH SOCIETY OF GASTROENTEROLOGY (BSG) GUIDELINES 2005 OF BARRETT’S OESOPHAGUS

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Aim: Establish adherence to BSG guidelines (2005) in the diagnosis, histological reporting, management & surveillance of Barrett’s oesophagus.

Methods: A retrospective, single centre audit identified patients (over a 10 month period, with 2 year follow up) who had a diagnosis of Barrett’s. Information was gathered from Clinical Results Reporting System and histological databases.

Results: 98 patients identified, mean age 65 (24-96), male: female 2:1. Macroscopic appearance of Barrett’s reported in 89% (87/98), average segment length 5.48cm. Biopsies obtained in all cases (mean 4.14), distance from incisors documented in 56% (55/98) and relation to GOJ in 21% (21/98), 1% (1/98) had biopsies taken in quadrants at 2cm intervals. Adjusted follow up endoscopy performed in 53% (52/98), average interval 14 months. Indefinite dysplasia was seen in 3% (3/98), low grade dysplasia in 2% (2/98), high grade dysplasia in 1% (1/98), and adenocarcinoma 1% (1/98).

Conclusions: 10 month analysis revealed unsatisfactory adherence to the guidelines, particularly in obtaining 4 quadrant biopsies at 2cm intervals and histological reporting. Follow up was sub optimal, with average repeat endoscopy time of 14 months in the 53% entering surveillance. This audit confirms that even an enthusiastic and active surveillance unit does not comply closely with BSG guidelines.

NICE GUIDELINES ON PREOPERATIVE TESTS IN ELECTIVE ENT SURGERY: A PROSPECTIVE AUDIT

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Objectives: We undertook a prospective study of the preoperative tests performed for elective ENT surgery at two UK hospital ENT pre-admission clinics in order to evaluate the impact of NICE guidance on preoperative testing practice.

Methods: Based upon specific NICE audit guidelines, we collected data prospectively on patients attending nurse-led pre-admission clinics for elective ENT operations performed at Queen Elizabeth University Hospital, Birmingham (QEH) and Worcestershire Royal Hospital, Worcester (WRH) over four weeks in 2008. QEH did not refer to NICE guidelines, whereas WRH had NICE guidance sheets available for reference.

Results: A total of 115 and 154 patients attended the WRH and QEH clinics, respectively. Non-compliance with NICE guidelines was higher at QEH with 34.4% of patients being inappropriately investigated, compared with 23.5% at WRH. The majority of unnecessary investigations (QEH 90.4%, WRH 81.3%) were performed on ASA I-II patients. Only 3 abnormal results were obtained at WRH (none affected the planned operation). No abnormal results were seen at QEH.

Conclusions: Through the adoption of NICE guidelines on preoperative testing, our study shows that the number of unnecessary and expensive tests performed on ENT patients can be reduced, but there is room for improvement (especially in the ‘healthy’ ASA I-II category).

THE USE OF CUSUM GRAPHS IN SURGICAL TRAINING

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Introduction: Clinical Governance and evidence of competence are core components of clinical practice. Surgical trainees undertake formal assessments, which maybe subjective (Mini-PAT), or single event assessments (DOPS, CBD, CEX, PBA). There are currently no advocated tools for recording progress and personal audit. CuSum (Cumulative Sum) graphs sequentially monitor an outcome. Their use have included assessing mortality (Bridgewater et al.) and new surgical techniques (Leandro et al.). Cases are plotted sequentially along the x-axis and cumulative achievement of a Gold-standard along the y-axis. A proportional linear relationship exists when all cases are successful. Deviations from this line identify unsuccessful cases.

Author’s Experience: A prospective personal audit on myringotomies was undertaken using this technique. A Gold-standard was the procedure being performed without trauma to the external auditory canal. Thirty consecutive operations were recorded. Five did not reach the Gold-standard, 4 were aged under 5 and one was a 55 year old with a prominent anterior ridge. This exercise allowed discussion with the Clinical Supervisor with tailored advice. The graph revealed an improving trend.

Conclusion: CuSum graphs allow continuous recording of achievement of a Gold-standard. Integrating these into portfolios produces an objective record of progress and simple identification of themes in difficult cases.

AUDIT ON THE AWARENESS OF LEG FASCICITOMY INCISIONS AMONGST PLASTIC SURGERY AND ORTHOPAEDICS JUNIOR DOCTORS

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Background: Surgical decompression remains the only effective treatment for leg compartment syndrome. Trainees involved in the care of trauma patients require good knowledge and skills in safe surgical approaches. This audit aimed to assess trainees’ awareness of these techniques.
**LAPAROSCOPIC ANTI-REFLUX SURGERY IMPROVES DAYTIME SOMNOLENCE**

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**Aims:** To establish if laparoscopic anti-reflux surgery (LARS) improves daytime somnolence.

**Methods:** Prospective analysis of pre and post operative Epworth Sleepiness Score (ESS) in twenty consecutive patients undergoing LARS in an Upper GI Unit in a six months period. The questionnaire asked subjects to rate their probability of falling asleep on a scale of increasing probability from 0 to 3 in eight different situations. The scores for the eight questions were added to obtain a single number. A number in the range 0–9 is considered to be normal while a number in the range 10–24 is considered to indicate that specialist medical advice should be recommended.

**Results:** ESS scores pre and six months post operatively were analysed using a paired t-test. A preoperative mean of 11.26 (on a scale of 0-24) was noted, the post operative mean was noted to be at 7.63. Application of Paired – t test indicated a p<0.05.

**Conclusions:** Patients with severe gastro-oesophageal reflux disease who underwent a LARS procedure noted a significant improvement in daytime sleepiness. This is perhaps most likely related to a reduction in nocturnal acid reflux-related arousals.

**LOSS OF ΔNP63 EXPRESSION IN OESOPHAGEAL SQUAMOUS CELLS: A CRITICAL STEP IN THE FORMATION OF BARRETT’S METAPLASIA?**

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Oesophageal cancer is the 6th leading cause of cancer death and has a 5 year survival of <15%. The incidence of oesophageal adenocarcinoma has tripled in the last 30 years. Patients often present with disseminated disease that responds poorly to conventional therapies. Barrett’s oesophagus is a premalignant lesion, characterised by metaplasia of squamous oesophageal epithelium into intestinal-like columnar epithelium at the gastro-oesophageal junction. Analysis of a panel of embryologically important genes implicated in Barrett’s using HET1A (an SV40 immortalised human oesophageal squamous cell line used extensively in previous studies) revealed absence of ΔNP63, a critical gene in the development of normal squamous epithelium. ΔNp63 mRNA and protein was expressed in biopsies from normal oesophagus and in primary squamous oesophageal cells from oesophagectomy specimens. In phase contrast HET1A cells appeared squamous, however in organotypic culture they lack squamous morphology and they demonstrate a cytokeratin expression profile suggesting early columnar differentiation. This data suggests that loss of ΔNP63 may be a fundamental step in the metaplastic response to acidic bile in the distal oesophagus and furthermore that the HET1A cell line may be a useful tool to study the early stages of Barrett’s transformation.