Methods: Ethical approval was granted by the MUHC. The hospital database and patient charts of 151 consecutive patients at Montreal General Hospital who underwent colorectal resection between 1st June 2008 and the 30th June 2009 were reviewed.

Results: 58 patients reviewed were in the ERAS pathway whilst 93 were base and patient charts of 151 consecutive patients at Montreal General Hospital data-

Conclusions: These results support current literature that enrolment in an ERAS pathway reduces hospital stay. Importantly, there is no increased rate of readmission if discharged home earlier from hospital. These data support implementation of an ERAS pathway in routine clinical use.

0341 AUDIOLOGICAL IMPLICATIONS OF EARPLUGS USED FOR THE PREVENTION OF EXTERNAL AUDITORY CANAL EXOSTOSIS
Venkat Reddy, Jyoti Srinivasan, Phil Flanagan. Royal Cornwall Hospitals NHS Trust, Truro, Cornwall, UK

Introduction: Prevalence of earplug use in surfers is poor even though it may prevent aural exostoses. Several varieties of ear plugs are available. Surfers often report that they dislike earplugs due to the consequent reduction in hearing.

Aim: To investigate the hearing impairment caused by earplugs used for the prevention of exostoses.

Methods: Staff and patients with normal hearing were recruited to have pure tone audiometry performed multiple times (without and with various earplugs). Three earplug types were tested (prefabricated elastomer, custom-fitted silicone, and custom-fitted acoustic). Vented and non-vented forms of the earplugs were tested.

Results: 30 normal hearing ears were included. Two-tailed paired t-tests comparing hearing thresholds between different earplugs identified that the elastomer earplugs caused the least hearing impairment (p<0.001). There was no significant difference in hearing thresholds between vented and non-vented elastomer earplugs (p=0.148), but the difference between fenestrated and non-fenestrated forms of other earplugs was statistically significant (silicone p=0.010, acrylic p=0.018).

Conclusion: Prefabricated ear plugs produce less hearing impairment than other commonly available earplugs. A customized earplug made of hard material causes the greatest impairment of hearing. We therefore recommend that for aquatic sports where hearing is important, a soft prefabricated earplug is preferable.

0343 INTEROBSERVER RELIABILITY OF THE “CLOCK FACE” METHOD OF DESCRIBING THE SITE AND SIZE OF TYMPANIC MEMBRANE PERFORATIONS
Venkat Reddy, Warren Bennett, Stuart Burrows, Jonathan Bird, Paul Counter. Royal Devon & Exeter NHS Foundation Trust, Exeter, Devon, UK

Introduction: Reported myringoplasty success rates are based on subjective descriptions of site and size of perforations. Objective methods such as measurement of otoendoscopic photographs are labour-intensive and impractical.

Aim: To describe and test the reliability of a subjective method of describing perforations based on the concept of the tympanic membrane as a “clock face” with the perforation being described by the “hours” between which it sits.

Methods: 30 otoendoscopic photographs of perforations were rated by 6 junior doctors (range 0-3 months ENT experience) and 6 ENT surgeons (range 4-26 years ENT experience) to give an estimation of percentage surface area, description of the site and to use the “clock face” method to describe size and site. Intraclass correlation coefficients (ICC) were calculated to indicate agreement.

Results: Raters mostly described perforation site by the quadrant occupied (i.e. anterior, posterior, superior, inferior, or a combination). ICCs for junior doctors and ENT surgeons were as follows: percentage perforation size 0.85 and 0.85; size of perforation by “clock face” method 0.91 and 0.96; site of perforation by “clock face” method 0.82 and 0.83.

Conclusion: The “clock face” method of describing perforations demonstrates substantial agreement between observers, irrespective of ENT experience.

0344 NECROTISING ENTEROCOLITIS AND THE PATHOLOGICAL OUTCOME AT SURGERY
Lucy Homer, Matthew Jones. University of Liverpool, Liverpool, UK

Background: The incidence of necrotising enterocolitis is notably high in very low birth weight infants and is the most common gastrointestinal emergency in neonatal intensive care, with up to 45% of confirmed cases of NEC requiring surgical intervention.

Aim: To audit the average length of time to surgery from initial deterioration of the neonate and the amount of affected bowel found.

Method: A retrospective audit of 80 patient’s notes born between 1997 and 2010 that required bowel resection for NEC. 51 neonates were male (63.75%). The average gestational age was 27 weeks (range 23–42); average birth weight 1.25±0.85037kg.

Results: 49% received TPN, 24.56% formula, 17.54% breast, breast and formula 8.77%. There were 28 (35%) deaths in total; in the mild disease group (<5cm affected bowel) 5 (29.41%) patients died, 10 (25%) in the moderate group (>5, <40cm) and 13 (56.52%) in the severe group (>40cm). In mild disease the average time to surgery was 4 days, 7 days in the moderate group and 6 days in the severe. The average time to operation was 6.1±6.3 days.

Conclusion: It appears that current practice of referral is adequate; however a consensus regarding when to refer to surgery is required due to the high mortality in this group.

0346 DOES TAB HAVE A ROLE IN THE MANAGEMENT OF GIANT CELL ARTERITIS? EXPERIENCE OF 81 CASES
Omar Hussain, Andrew McKay, Robert Orr, Peter Doyle. Chesterfield Royal Hospital, Chesterfield, UK

Introduction: Temporal Artery Biopsy (TAB) aids in the diagnosis of Giant Cell Arteritis (GCA) with a specificity and sensitivity of 100% and 87% respectively. Clinical diagnosis using a five point scoring system formulated by the American College of Rheumatology (ACR) 1990 has a specificity of 54% and a sensitivity of 93.5%.

Methods: Retrospective and prospective audit of 81 TABs carried out over a 26 month period.

Findings: Of the 81 specimens sent for histopathological analysis 12 displayed evidence of GCA. There was a strong correlation between the clinical diagnoses on ACR scoring and the biopsy result. With those displaying more clinical features of the disease being significantly more likely to have a positive TAB. Our mean specimen length is 31.3mm.

Conclusion: After correlating findings of TAB and the ACR guidelines, our recommendation would be to restrict the use of TAB. We propose indications for TAB. In our experience ACR guidelines are sufficient to preclude the need for TAB where sufficient clinical criteria are met.

Discussion: Our experience suggests TAB in most cases contributes little to the management of GCA. Physicians tend to manage suspected cases of GCA with steroids irrespective of findings of TAB.

0348 PERI-ANAL ABSCESS: A SUITABLE TASK FOR THE JUNIOR TRAINEE? AN AUDIT OF LOCAL PROTOCOL AND MANAGEMENT
Ruth Benson R, Louise Steinhoff, Chris Lamb, A. Senapati. Queen Alexandra Hospital, Portsmouth, UK

Management of abscess is one of the most common emergency procedures carried out by junior surgical trainees. Perianal abscess however, can be a symptom of significant pathology e.g. Crohn’s disease, and the procedure is considered a separate competency on the Intercollegiate Surgical Curriculum Programme. There are no national guidelines available, therefore those unfamiliar with colorectal practice may unknowingly put patients at risk of sphincter damage, recurrence and delayed diagnosis of inflammatory bowel disease. A hospital protocol was therefore developed, against which we audited our own practice.
We audited management of 30 consecutive patients admitted as surgical emergencies with perianal abscess. Findings were compared with a standard protocol written by our local colorectal department. Only 13% (4/30) of patients' treatment followed protocol. Omissions included lack of formal examination under anaesthetic and omitting colorectal follow-up. All four patients whose management met the standard had been operated on by a senior colorectal trainee, or by trainees supervised by a colorectal consultant. This audit has highlighted significant variation in the management of perianal abscesses by trainees within our hospital. These disparities risk delayed diagnosis of underlying pathology and recurrence i.e. patient morbidity. Improved education and guidance of trainees with an agreed local protocol is warranted.

0349 EMERGENCY REFERRALS TO THE GENERAL SURGICAL TEAM AT A UK DISTRICT GENERAL HOSPITAL
Arpan Tahim, Adam Hussain, Rosamond Jacklin, Priya Patel, Christopher Kelley. Wrexham Maelor Hospital NHS Trust, Wrexham, UK

Introduction: Emergency surgical workload is often underestimated by clinical coding processes, which derive estimates based on admission figures, procedure codes or tariffs. The aims of this study were to accurately identify the volume and nature of actual work carried out by the acute surgery team in a typical District General Hospital.

Methods: Patient handover sheets, routinely used to facilitate doctor changeover, were analysed to identify patients referred to the general surgery on-call team over a 4 month period. Patient demographic information and presenting features were prospectively recorded. Information regarding length of stay, diagnosis and treatment were prospectively collected. Information regarding length of stay, diagnosis and treatment were recorded. Information regarding length of stay, diagnosis and treatment were recorded.

Results: 1169 patients were referred to the general surgical team with 67.7% requiring admission. 9.5 referrals were received each day. 68% received imaging. 65 patients were admitted each day. 21% required emergency operative intervention. Average length of stay was 4.3 days. 36% received follow-up. Substantial numbers of outpatient procedures and investigations were organised directly from these episodes.

Discussion: Patient handover documents are useful in identifying true surgical workload. Estimates of workload based on operative procedures or surgical admissions are likely to markedly underestimate true surgical workloads. It is important to take this into account during rota allocations and future service re-structuring processes.

0351 AUDIT OF COMPLIANCE WITH THE SEPSIS RESUSCITATION BUNDLE IN EMERGENCY SURGICAL PATIENTS
Henry Bevis, James Mitchell, Julie Cornish. Wrexham Maelor Hospital, North Wales, UK

Background: Sepsis is a major cause of mortality: however management of sepsis had been shown to be suboptimal. The 'Surviving Sepsis' Campaign is an international collaboration which recommends a core 'Sepsis six' bundle for all septic patients. This audit measures compliance following introduction of the protocol.

Methods: This was a prospective audit of all new surgical admissions over a consecutive five week period. The admission documents for each new patient were reviewed to determine whether they fulfilled the criteria for sepsis on presentation. Compliance with individual and elements of the sepsis bundle were recorded. Outcomes included use of blood cultures, lactate, chest x-ray and timing of antibiotics.

Results: Thirty two patients met the criteria for sepsis. Compliance with individual bundle elements ranged from 25 - 94%. Seventy two percent of patients received antibiotics within three hours (38% < 1hr). Thirty eight percent had their lactate assessed. All elements of the bundle were completed in only 3 patients (9%).

Discussion: Management of sepsis is still suboptimal. Antibiotic therapy was often delayed until senior review of patients. Lactate was infrequently checked, but this was not shown to alter the management. Junior staff need further education to expedite intervention for patient's with sepsis.

0357 SURGICAL MANAGEMENT OF PULMONARY METASTASES FROM COLORECTAL CANCER – THE MERSEY EXPERIENCE
Andrea Sheed, Ahsan Javed, Adnan Sheikh, John Adu, Richard Page, Paul Rooney, Royal Liverpool University Hospital, Department of Surgery and Oncology, Liverpool, UK, Liverpool Heart and Chest Hospital, Liverpool, UK

Aims: Pulmonary metastasectomy for colorectal carcinoma (CRC) is a well-accepted procedure; however data regarding indications and prognostic outcomes are inconsistent. This study aimed to evaluate clinically relevant prognostic factors affecting survival.

Methods: A retrospective analysis of patients with pulmonary metastases from CRC undergoing thoracotomy between 2004 and 2010 at a single surgical centre was performed. Data regarding age, sex, disease-free interval (DFI), location and histology of primary tumour, number of lung lesions (and size of largest resected metastasis), type of lung resection, nodal involvement ( hilar/ mediastinal), use of adjuvant treatment, presence and surgery for liver metastases and follow-up survival were obtained.

Results: Sixty six patients with pulmonary metastases from colon (n = 34) and rectum (n = 32) were identified. Median DFI was 19.5 months, median survival was 45 months and cumulative 3 year- survival was 61%. Size of pulmonary metastasis was the only statistically significant prognostic factor (p = 0.047) with lesions over 20mm associated with worse prognosis.

Conclusion: Pulmonary metastasectomy has potential survival benefit for patients with metastatic CRC. Improved survival even in the presence of hepatic metastases or multiple pulmonary lesions, justify aggressive surgical management. In our cohort, size of metastatic deposit was a statistically significant poor prognostic factor.