**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 reviewed in the standard care pathway. 30 day readmission rate was 10.3% and 9.7% respectively (p=0.98). Mean hospital stay was 7.21 days (95%CI: 5.50,8.92) and 10.55 days (95%CI: 8.58,12.52) respectively (p=0.02). No significant difference in patient ASA morbidity was observed (p=0.64).

**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

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**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 acrylic). Vented and nonvented 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

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**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 0.88.

**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

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**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 49% 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 1.255±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 ( $\leq$ 5cm affected bowel) 5 (29.41%) patients died, 10 (25%) in the moderate group (>5, <40cm) and 13 (56.52%) in the severe group ( $\geq$ 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 $\pm$ 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

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**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 91.2% and 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

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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.

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