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CXCR3+ cell populations. Pre-transplant measurement of serum CXCR3binding chemokines appears not suitable for clinical risk assessment in transplant patients receiving induction therapy.

### 0287 THE USE OF DIODE LASER IN ADULT ENT PROCEDURES

Yogesh Bajaj<sup>1</sup>, Ravjit Sagoo<sup>1</sup>, Simon Carr<sup>2</sup>, C.J. Woodhead<sup>2</sup>. <sup>1</sup>*Castle Hill* Hospital, Cottingham, UK; <sup>1</sup>Leeds General Infirmary, Leeds, UK

**Objectives:** To report our experience in the use of a fibre-delivered diode laser in a variety of ENT pathologies in adults.

**Methods:** Retrospective study reviewing 40 diode laser procedures performed on 30 adult patients. The procedures were performed on the ear, nose and larynx. Follow-up after the procedure ranged from 1 year to 4 years.

**Results:** 56% of patients were cured of their initial pathologies after treatment with diode laser. 3 patients will be receiving repeat laser treatments (2 patients with hereditary haemorrhagic telangiectasia and 1 patient with choanal atresia). The remaining 8/30 (26.6%) had to undergo further treatment for the initial pathology or a different pathology. There were no laser related intraoperative or postoperative complications.

**Conclusions:** The diode laser is a good tool for several ENT pathologies. The ability to guide the laser light using a flexible glass fibre directly onto the area requiring vaporisation enables extremely precise treatment.

# 0288 LAPAROSCOPIC AORTIC SURGERY IN COLCHESTER: ACCEPTABILITY OF A LEARNING CURVE IN THE MODERN ERA

Sunita Saha, Neal Banga, Ross Davenport, Haroon Thomas, Simon McKenzie, Tan Arulampalam, Don Menzies, Peter Patient, Tamas Malaj, Sohail Choksy, Roger Motson, Christopher Backhouse, Adam Howard. *Colchester University NHS Trust, Colchester, UK* 

Laparoscopic aortic aneurysm surgery has been pioneered over the last 17 years in Canada, USA and Europe. In 2007, NICE deemed this method safe and effective allowing further development of the technique in the UK.

We present the outcomes of the first 28 consecutive laparoscopic and 35 open aneurysm repairs from 01/11/2007 to 01/11/2010 performed in our institution, one of four centres in the UK developing this technique. Laparoscopic repairs were prospectively audited against consecutive open repairs for quality assurance purposes. Patients in both groups were of similar age, sex and co-morbidities. Results were analysed using students t-test.

The intra-operative data showed that aneurysm morphology was similar in both groups, the laparoscopic operative time was statistically longer (median 330 versus 240, P<0.01), clamp times were similar (80mins versus 76mins) and median scar length (14cm versus 30cm, P<0.01) was less than half that of the open surgery.

Statistically fewer major complications (P<0.05) were noted in the laparoscopic group (0% mortality). Epidural use, mean pain scores (P<0.04), time to commence solid diet (Median 1 versus 4days, P<0.01), mobilisation (1 versus 4days, P<0.01), and post-operative stay (6 versus 10days, P<0.05), were all shorter in the laparoscopic compared to the open group.

## 0289 THE IMPACT OF THE LAPAROSCOPIC SKILLS COURSE IN SURGICAL TRAINING

Sami Mansour, Kumaran Ratnasingham, Nizar Din, George Vasilikostas, Marcus Reddy, Andrew Wan. *St George's Healthcare NHS Trust, London, UK* 

**Aims:** To determine the efficacy of the core laparoscopic skills course using the virtual reality simulator (VR) and satisfaction questionnaires.

**Methods:** Forty doctors with minimal laparoscopic skills over 2 years participated in this study. Teaching session was given to explain how to carry out PEG transfer and clipping skills using the VR. The candidates performed the two skills before and after the course. The parameters assessed included; total time taken, total path length of right and left instrument, clips applied in marked area and maximum vessel stretch.

The candidates completed questionnaires before and after the course stating their level of experience and degree of satisfaction with the course. **Results:** The time taken for the PEG skill improved by 48%, total left hand and right hand length by 40% and 44% respectively. The total time in the clipping skill improved by 57%. Thirty eight percent improvement in clips applied in the marked area and 41% in maximum vessel stretch. Ninety six percent of the candidates were satisfied with the teaching techniques, ninety three percent were satisfied with the lecturing part and 95% percent felt they became more confident.

**Conclusions:** This study demonstrated candidate satisfaction with the core laparoscopic skills course.

# 0293 ANTIBIOTIC USAGE FOLLOWING ELECTIVE COLORECTAL RESECTION FOR CANCER

Alison Lyon <sup>1</sup>, Graham J. MacKay <sup>2</sup>, Richard G. Molloy <sup>3</sup>, Patrick J. O'Dwyer <sup>4</sup>. <sup>1</sup> Crosshouse Hospital, Kilmarnock, UK; <sup>1</sup> Glasgow Royal Infirmary, Glasgow, UK; <sup>1</sup> Gartnavel General Hospital, Glasgow, UK; <sup>1</sup> Western Infirmary, Glasgow, UK

**Background:** C-reactive protein (CRP) levels >145mg/L on the fourth postoperative day have been shown to be predictive of septic complications after elective colorectal cancer resection. Infection rates, antibiotic usage and CRP data after colorectal resection were examined, to determine if a practical role exists for CRP in pre-empting infective complications.

**Methods:** We carried out a prospective analysis of 160 patients undergoing elective colorectal cancer resection between September 2003 and October 2006. 30-day morbidity was recorded, plus timing and duration of antibiotic therapy. The relationship between CRP and antibiotic therapy was examined.

**Results:** Of 150 patients included in analysis, 44 (29%) developed a complication, of which 32 (21%) were infective. Of the 44 patients with CRP>145mg/l, 28 (61%) had an infective complication. 5 (4%) patients with a CRP below this level on day 4 experienced an infective complication. Of 132 patients with antibiotic data, 41 (31%) patients received antibiotic treatment in the postoperative period. Antibiotics were commenced on a median of day 5, and median duration of treatment was 8 days.

**Conclusion:** One third of patients receive antibiotics following elective colorectal resection. A strategy of pre-emptive antibiotics guided by day 4 CRP may rationalise prescribing and facilitate earlier treatment of infective complications.

### 0294 DUAL LOCALISATION WITH ULTRASOUND AND TECHNETIUM (99MTC) SESTAMIBI SPECT IN MINIMALLY INVASIVE PARATHYROIDECTOMY FOR PRIMARY HYPERPARATHYROIDISM

Alison Lyon <sup>1</sup>, Peter Donaldson <sup>2</sup>, Segun Komolafe <sup>2</sup>, Christopher R. Wilson <sup>3</sup>. <sup>1</sup> Crosshouse Hospital, Kilmarnock, UK; <sup>1</sup> Gartnavel General, Glasgow, UK; <sup>1</sup> Western Infirmary, Glasgow, UK

**Background:** Localisation of parathyroid adenomas prior to surgery facilitates a minimally invasive approach. Multiple imaging modalities have been employed in an attempt to identify the site pre-operatively. We explored the accuracy of both ultrasound and Technetium (99mTc) sestamibi scintigraphy with single photon-emission computed tomography (SPECT).

**Methods:** A retrospective study of consecutive series of 119 patients undergoing minimally invasive parathyroidectomy was carried out. Inclusion criteria incorporated clinical evidence of primary hyperparathyroidism and histological adenoma confirmation. All patients had at least one form of imaging: ultrasound, 99mTc sestamibi SPECT or both. Accuracy was compared with surgical findings. Gland weight was also related to imaging accuracy.

**Results:** This group contained 93 (78%) patients who were identified to have parathyroid adenomas. 69 patients (74%) had ultrasound, 84 patients (90%) had SPECT and 66 patients (71%) had both scans. Ultrasound had a sensitivity of 0.59, SPECT sensitivity was 0.63. If both scans concurred, sensitivity was 0.9. The combination of both scans was more reliable than ultrasound (P=0.02) or SPECT (P=0.01) alone. There was no evidence of a relationship between gland weight and scan reliability.