

typically incidental. Tissue received by the Pathologist is routinely sectioned and depending on macroscopic findings, part or all of the tissue is processed to be examined microscopically. We hypothesised incidence differs depending on how much thyroid tissue is processed for microscopic examination.

Methods: All thyroid lobes and whole glands from NHS Greater Glasgow and Clyde hospitals received in a centralised Pathology laboratory between 1st June 2012 - 1st June 2013 were included.

Results: N=267, 121 whole glands, 146 hemi-lobectomies. 36 patients had PMC, 18 of whom had surgery for benign disease. Incidence of PMC was 27% when the entire tissue was examined, and 19% when only part examined microscopically in the total thyroidectomies ($p=0.325$). In hemi-lobectomies, 8.4% and 5.7% were found to have PMC when all or part of the lobes were examined respectively ($p=0.522$). Multifocal PMC was 30% in both groups, and metastatic in 3 cases.

Conclusions: There is a wide variation in PMC depending on how much thyroid tissue is examined, suggesting it is under reported. However this was not significant and has limited clinical significance as PMC rarely metastasises.

0717: POST-THYROIDECTOMY PARATHYROID HORMONE LEVELS AS A TOOL TO GUIDE CALCIUM REPLACEMENT: IS THIS BEING USED IN PRACTICE?

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Introduction: According to local guidelines, post-thyroidectomy parathyroid hormone (PTH) measurement can indicate the risk of subsequent hypocalcaemia and guide need for calcium replacement. Calcium replacement is not without risk and should be avoided without clear indication. Values of PTH >2 pmol/L should preclude empirical calcium replacement as patients in this range are extremely unlikely to become hypocalcaemic. We examined local adherence to these recommendations.

Methods: Total and completion thyroidectomy procedures between October 2012 and December 2013 were identified from theatre records. Corresponding electronic patient records were reviewed for demographics, results and management.

Results: During this period, 63 relevant thyroidectomies were performed. The average patient age was 53.6 years and 21% were male ($n=13$). 59% of operations ($n=37$) were for thyroid cancer and 22 were for multinodular goitre (35%). Other indications included thyroid nodules or ectopic thyroid. Of 57 patients who underwent PTH measurement < 24 hours post-operatively, 23 had levels of >2.0 pmol/L. Two patients of these had mild post-operative hypocalcaemia (2.0-2.1) and one was symptomatic, requiring calcium replacement. However, fifteen patients (65%) were discharged on calcium replacement therapy.

Conclusions: The incidence of excessive calcium replacement is high. Adherence to local guidelines could greatly reduce this.

1719: ARE FALLING RATES OF TONSILLECTOMIES CAUSING INCREASED RATES OF TONSIL RELATED MORBIDITY?

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Introduction: This retrospective cohort study aims to establish if the introduction of the Non-Essential Surgical procedures policy is associated with an increase in the number of hospital admissions for tonsillitis in the face of a falling rate of tonsillectomy.

Methods: Patients admitted to a district general hospital between 1/10/12 - 31/12/12 and 1/10/10 - 31/12/10 for acute tonsillitis were identified using clinical coding statistics. Clinical notes were used to establish diagnosis, treatment, length of stay and cohort demographics.

Results: In 2010 37 patients were admitted, 24 paediatric (average age 2 yrs (range 1-10yrs) average length of stay 0.5 days (range 0-3 days)). Average adult age 28yrs (range 18-44yrs), average length of stay 1.8 days (range 1-4 days). 8% had a peritonsillar abscess and 16% had subsequent tonsillectomy. In 2012 83 patients were admitted, 61 paediatric, (average age 3 yrs (range 0-15yrs) average length of stay 0.4 days (range 0-3 days)). Average adult age 23yrs (range 16-46 yrs), average length of stay 1.7 days (range 1-4 days). No peritonsillar abscess' and 1.2% had subsequent tonsillectomy.

Conclusions: The number of patients admitted with tonsillitis more than doubled from 2010 to 2012. However there was no evidence of higher complication rates and average length of stay was comparable.

0733: MORBIDITY RATES FOLLOWING MASTOID SURGERY

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Introduction: A comparison of mastoid surgery morbidity rates at our Trust against the standards set by the Royal College of Surgeons of England comparative audit of ENT surgery 1995.

Methods: Retrospective data collection was carried out, looking at a five year period of mastoid surgery at a single centre. Data on 95 operations was collected, 75 primary and 20 revisions.

Results: We had better results compared to national audit. The hearing post-op remained unchanged for 61.1% (30.8% standard), with improvement in 15.8% (16.8% standard) and decline in 6.3% (11.9% standard). The condition of the ear cavity was dry in 80% (62.6% standard) and wet in 10.5% (15% standard). 1.1% had a temporary facial nerve palsy, compared to the standard of 0.6% for permanent palsy. There were no cases of 'dead ear' (1.3% standard).

Conclusions: We had lower rates of complications, with no cases of dead ear and one temporary facial nerve palsy. The decline in hearing post-operatively was less frequent, and hearing remained unchanged in more cases. We found higher rates of dry ear cavity at 6 months postoperatively. At the trust we currently have good morbidity rates, improving on the standards set out by the National Audit.

0780: AN AUDIT ON ANALGESIA POST-TONSILLECTOMY

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Introduction: To audit current practice for post-operative tonsillectomy analgesia and compare this with identified standards from the current evidence base.

Methods: Review of the literature suggested the optimal combination of analgesia was: Paracetamol, NSAID (preferably Ibuprofen) and weak opiate (preferably Codeine). Last 100 tonsillectomies performed at a large university teaching hospital were identified. All patients undergoing a bilateral tonsillectomy aged between 17-50 years were included. Electronic patient notes were reviewed including: discharge prescriptions, allergies, co-morbidities and any re-attendances to A&E post-operatively.

Results: 51% of patients were prescribed a combination of Paracetamol and NSAID and a weak opiate. 42% were given the preferred combination of Paracetamol, Ibuprofen and Codeine. There was a wide variation in different combinations of analgesia prescribed. 11% of the cohort re-attended A&E. Four patients attended for poor pain control. All but one, were not on optimal pain relief. A re-audit has shown overall improvement in compliance with guidelines but a larger number of different combinations.

Conclusions: Tonsillectomy is considered to be one of the most painful ENT procedures. There is significant inter-surgeon variation in prescriptions. Local departmental standards have been agreed as a result of this audit but a strong evidence base would help standardise this further.

0791: A TWO-CYCLE AUDIT ON HYPOCALCAEMIA POST COMPLETION AND TOTAL THYROIDECTOMY – ARE WE FOLLOWING THE GUIDELINES?

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Introduction: British Thyroid Association guidelines state that serum calcium should be checked on the day after surgery and daily until the hypocalcaemia improves. The aim of the audit is to evaluate adherence to guidelines.

Methods: First cycle includes all completion/total thyroidectomy patients from January 2007- June 2010. The second cycle includes all patients from January 2012-2013. Information collected from retrospective case-note review included thyroid pathology, central compartment neck dissection, number of lymph-nodes harvested, consecutive serum calcium levels, administration of calcium supplements and discharge on calcium.

Results: A total of 57 and 40 patients were included in the first and second cycle, respectively. The first-cycle showed that serum calcium measured on day 0 post-operatively were not indicative of developing hypocalcaemia and were all greater than 2.0mmol. Results from the first-cycle showed that, 25/106 (23.6%) did not receive a calcium check in the first 24 hours. Following the presentation of first-cycle results and BTA guidelines to the

ENT department, results from the re-audit showed that all patients received a calcium check within the first 24 hours and daily until calcium was stable.

Conclusions: This two-cycle audit has shown that calcium should be checked at 24 hours post-operatively. Increasing awareness of BTA guidelines has improved calcium monitoring.

0812: REVISITING AN OLD TECHNIQUE: LOCAL ANAESTHETIC FOR MYRINGOPLASTIES

Rachel Edmiston*, Angus Waddell. *BRINOS Charity, Nepal.*

Introduction: This audit looks at pain levels experienced by patients having myringoplasties under local anaesthesia in a rural hospital in Nepal.

Methods: Three days of consecutive patients were included in the study from the BRINOS November 2013 camp in Nepalgunj. All surgeons performing the operations were asked to give patients 2-3 vials of lignospan via a dental syringe using a standard technique. Patients were asked immediately following their operation how they would grade the severity of their pain whilst on the operating table using a visual analogue scale from 0 – 10.

Results: 42 consecutive patients were included with a total of 40 myringoplasties and 2 stapedectomies. Mean pain score was 2.17 (95% CI 1.41, 2.92). 56% of patients gave pain scores of less than 1/10 with only 14% reporting levels >5/10.

Conclusions: In this rural setting there is little alternative to the current technique and this audit confirms that adequate pain control can be achieved with the local anaesthetic technique used.

0814: HOW ACCURATE ARE SURGEONS AT PREDICTING PAIN LEVELS EXPERIENCED BY PATIENTS DURING LOCAL ANAESTHETIC?

Rachel Edmiston*, Angus Waddell. *BRINOS charity, Nepal.*

Introduction: This audit aims to assess surgical accuracy in estimating pain levels for patients undergoing myringoplasty and stapedectomies under local anaesthesia.

Methods: All patients operated on over a three day period during the BRINOS camp in November 2013 were included in the audit. A standardised technique was used for administration of local anaesthetic and pain scores taken from patients immediately post operatively. Surgeons were asked to predict what pain level the patient would report using the same visual analogue scale from 1-10.

Results: 42 consecutive patients were included with a mean pain score reported from patients of 2.17 (95% CI 1.41, 2.92). Mean surgeon prediction was 1.95 (95% CI 1.55, 2.36). Surgeons were more likely to over predict the pain score (57%) however 10% significantly under estimated the level of pain that the patient was experiencing. Spearman's rank correlation coefficient = 0.095 with a significance value of $p > 0.5$.

Conclusions: There was no significant correlation found between surgeons predictions and patients scores demonstrating that the surgeons understanding of the pain levels differs significantly from those of the patient.

0842: CARE OF THE DYING ENT INPATIENT

Katherine Conroy*, Hannah Clare, Jonathan Hobson. *University Hospitals South Manchester, Manchester, UK.*

Introduction: Good palliative care for the Ear, Nose and Throat (ENT) inpatient poses a series of challenges; patients may deteriorate quickly and have difficulty verbalising their wishes. With our Trust's introduction of a new Do Not Attempt Resuscitation (DNAR) policy and negative media coverage surrounding the Liverpool Care Pathway (LCP) we evaluated our communication regarding these issues.

Methods: 17 inpatients died in our ENT department over 2 years. Their notes were examined to see if we were meeting the communication standards set out by the LCP.

Results: DNAR orders (16/17 patients) 9 signed by senior member of staff (ST3+), 7 by junior. Discussed with patient - 6; unable to - 6; not discussed - 4. 10 discussed with patient's family. LCP (7/17 patients). All discussed with patient and family where possible. Recognised as dying prior to death (16/17 patients). 8 discussed with patient and family by senior member of staff; 8 by junior or nurse

Conclusions: Good communication is essential for the care of the dying ENT patient. We should involve patients and families more in dialogues surrounding DNAR orders, and encourage senior members of the team to lead discussions once a patient is identified as dying.

0850: PENETRATION THROUGH OTOWICKS

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Introduction: Otowicks are used to treat otitis externa with significant ear canal oedema. How well drops penetrate otowicks to reach the deep canal has not been investigated. This in vitro study aims to investigate the permeability of otowicks to bacteria and commonly used eardrops.

Methods: Sterile otowicks were inserted into mock ear canals fabricated from plastic pipettes held over pseudomonas-seeded agar plates. Gentisone and Ciprofloxacin drops were administered; four drops, TDS for 5 days. Time taken for the drops to penetrate through the otowick and exert bactericidal activity was recorded. Separately, bacteria-laden otowicks were treated with saline or antibacterial drops. The penetrating drops fell onto sterile agar plates. We observed for bacterial growth.

Results: The first four drops of Gentisone and Ciprofloxacin did not penetrate the otowick, the latter showed delayed penetration after five days. When sterile saline drops were applied to bacteria-laden otowicks, bacterial growth was seen on agar plates indicating bacterial penetration. When a bacteria-laden otowicks were treated with antibacterial drops, no bacteria was grown on the corresponding agar plate.

Conclusions: Bacteria can penetrate through otowicks but this can be prevented by continuous antibacterial ear drops. Otowicks may need to be primed with 5-8 drops before starting a regime as the initial dose is fully absorbed by the otowick.

0918: DEEP NECK SPACE INFECTIONS IN CHILDREN: THE ROLE OF SURGICAL AND CONSERVATIVE MANAGEMENT

Katherine Conroy*, Rhydian Harris, Archana Soni-Jaiswal, Michael Rothera, Iain Bruce, Jaya Nichani. *Royal Manchester Children's Hospital, Manchester, UK.*

Introduction: This study aims to analyse our unit's experience in managing deep neck space infections over a ten-year period with a view to developing a management algorithm.

Methods: The primary outcome measure was effectiveness of conservative or surgical treatment. The secondary outcome measures include complications, length of stay and duration of antibiotic use.

Results: 22 children were identified with a parapharyngeal (13), retropharyngeal (4) abscess or both (5). Mean length of stay was shorter in conservatively (11.8 days) than surgically managed (12.9 days) patients. Mean abscess size was larger in surgically (8.5cm) than the conservatively managed (5.5cm) patients. No patient was re-admitted for surgical drainage and there were no mortalities.

Conclusions: Small collections in the deep neck spaces can be successfully managed conservatively, with surgical drainage reserved for large collections and children who do not respond to antibiotics. The management algorithm developed from this study is described.

0939: CAN WE PREDICT WHICH CHILDREN WILL GO HOME THE SAME DAY AFTER MICROLARYNGOSCOPY-BRONCHOSCOPY?

Stephanie Chiu*, Lyndsey Webster, Haytham Kubba. *Royal Hospital for Sick Children, Glasgow, Glasgow, UK.*

Introduction: To identify a subset of children who may be predicted in advance as suitable for day case microlaryngoscopy-bronchoscopy (MLB).

Method: The first audit cycle identified that children who weighed greater than ten kilograms, and who did not have any significant co-morbidity were more likely to be discharged on the same day as their MLB. In this second audit cycle, 71 MLB procedures performed between November 2010 and the first week of February 2011 were reviewed, with a view to determine the predictive value of these two pre-operative patient characteristics. Thirty-nine procedures were appropriate for analysis. A Fisher's exact test was used to determine statistical significance, with $p < 0.05$. Of the 25 first-time MLBs, all those done for recurrent croup (3 cases) had a same-day discharge, whereas at least 80% of those done to investigate stridor and other symptoms required an overnight stay.

Results: Neither of the above criteria was found to be significant for predicting the suitability of a child for a day case MLB.

Conclusions: The second cycle suggests that the main presenting symptom may be a more important predictor than pre-operative patient characteristics.