bowel preparation was also significantly affected by gender but not by operator or age group.

**Conclusions:** The adequacy of bowel preparation is affected by the timing of bowel prep administration. Bowel preparation regimes for morning lists may need to be adjusted to reduce the risk of missed lesions in this group.

**Endocrine surgery**

**0150: HISTOPATHOLOGICAL CHARACTERISTICS OF ADRENAL INCIDENTALOMAS IN A HIGH VOLUME UNIT, A 7-YEAR EXPERIENCE**
Michael Feretis, Philippa Orchard, Taw Chin Cheong, Chas Ubihi. Nottingham University Hospitals, Nottingham, UK.

**Introduction:** With increased use of sophisticated abdominal imaging incidental adrenal masses have become a commoner finding. The aim of this study was to evaluate the histopathological characteristics of such lesions following adrenalectomy in a tertiary referral centre.

**Methods:** Data on 77 patients (46 female) who underwent an adrenalectomy in our institution between January 2006- October 2013 were collected retrospectively from our institution’s electronic patient database. Data was collected on patient demographics, imaging report, biochemistry findings, operative details and specimen histology.

**Results:** 18/77 patients (23.4%) with a median age of 33.5 years (range 23-44) underwent an adrenalectomy for incidentaloma. 13/18 patients (72.2%) underwent the procedure laparoscopically. 14/18 lesions (77.7%) were diagnosed by CT; 3/18 (16.7%) by ultrasound and 1/18 (5.5%) by MRI. On histological analysis 8/18 lesions (44.4%) were adrenal adenomas; 5/18 (27.8%) were benign cysts; 2/18 (11.1%) were pheochromocytomas; 1/18 (5.5%) was a myelolipoma; 1/18 (5.5%) was a case of adrenal hyperplasia and there was a sole case of primary adrenal malignancy (adrenocortical carcinoma).

**Conclusions:** In our experience adrenal incidentalomas are benign in nature, however, early specialist referral along with detailed radiological and biochemical assessment should be routinely performed for such lesions.

**0409: IS SUB-TOTAL PARATHYROIDECTOMY RENAL PROTECTIVE COMPARED TO TOTAL PARATHYROIDECTOMY IN RENAL TRANSPLANT PATIENTS? A COMPARATIVE STUDY**
M. Crockett, P.C. Munipalle, A.G. Edwards, J.D. Morgan. Southmead Hospital, Bristol, UK.

**Introduction:** Sub-total parathyroidectomy (STP) is considered renal protective in comparison with total parathyroidectomy (TP) in renal hyperparathyroid patients, especially in renal transplant patients. We compared the effects of these two operative methods to identify if such an advantage exists.

**Methods:** The renal parathyroid patients who underwent parathyroidectomy by a single surgeon over a 10-year period after successful renal transplantation were identified from a prospectively maintained database. 3½ glands were identified as the STP group. The sub groups of STP and TP were compared in terms of renal function (primary end point), bone profile and recurrent hyperparathyroidism (secondary end points).

**Results:** A total of 19 patients were included in this study (STP - 7 and TP - 12). The renal function while showing a slight reversible deterioration in the immediate post-operative period was comparable in both groups (p= 0.56). Other parameters of bone profile (Calcium, Phosphate, and Alkaline Phosphatase) also showed similar trend. However, one patient developed recurrent hyperparathyroidism in the STP group (14%).

**Conclusions:** Our study showed there is no advantage of STP over TP in post renal transplant patients. Recurrence of hyperparathyroidism is a risk with STP and this has to be taken into consideration in these precious patients.

**0844: THE EFFICACY OF DIAGNOSTIC THYROID LOBECTOMY IN PATIENTS WITH POSSIBLE THYROID CANCER AND INCONCLUSIVE CYTOLOGY ON FINE NEEDLE ASPIRATION**
Noel Aruparayil, Rachel Czajka, Charlotte French, Julia Baldwin, Mark Lansdown. Leeds Teaching Hospitals NHS Trust, Leeds, West Yorkshire, UK.

**Introduction:** To analyse the efficacy of diagnostic thyroid lobectomy in patients following inconclusive cytology on Fine Needle Aspiration (FNA) in suspected thyroid cancer.

**Methods:** Retrospective analysis of patients with suspected thyroid cancer who underwent diagnostic thyroid lobectomy from November 2011-2013. Data collected and analysed included demographics, tumour size, pressure symptoms & outcomes of FNA. THY1, THY3 and THY4 considered inconclusive (THY2 benign, THY5 malignant). Patients divided into two groups according to lobectomy histology result – Benign & Malignant.

**Results:** 40 patients recruited. Female 32: Male 8. Median age 48.5. 35% patients with inconclusive cytology had cancer. No patient had THYS5 cytology. In Malignant group 92.8% patients had inconclusive FNA, whereas 7.1% had THY2. All THY4 cytology were cancer positive on final histology. Benign group FNA results were 38.4% THY1, 7.6%THY2 & 53.8% THY3. Overall 66.6% patients with THY2 on first FNA had malignancy on histology. 35.7% had pressure symptoms in malignant group & 19% in Benign group. Average tumour size 3.54 cm (1-78).

**Conclusions:** Consideration should be given for diagnostic thyroid lobectomy on ALL patients with inconclusive cytology on first FNA or with Benign (THY2) cytology and strong clinical suspicion of thyroid cancer.

**ENT surgery**

**0099: CAN VOICE ANALYSIS BE USED TO DIAGNOSE AND MONITOR PEDIATRIC VOICE DISORDERS?**
Shilpa Ojha, Steve Matu, Catherine Ballif, Christopher Hartnick. Massachusetts Eye & Ear Infirmary, Boston, MA, USA.

**Introduction:** Diagnosis of paediatric voice disorders is based on subjective and objective measures. With normative voice data now available, we wanted to see if computer-assisted voice analysis could serve as an objective diagnostic and monitoring tool.

**Methods:** Retrospective data was collected of 200 children who were seen in our outpatient paediatric otolaryngology clinic over 5 years. These were all children who were diagnosed with either a vocal fold nodule or vocal fold cyst. Voice recordings were made in a quiet room using the "Multi-Dimensional Voice Program (MDVP)" software. The clinical variables we looked at were fundamental frequency and maximum phonation time. Each child also had fiberoptic endoscopy to confirm their diagnosis.

**Results:** There were clear differences in voice analysis, from the normative values, in children with vocal fold nodules and cysts. Maximum phonation time for children with vocal fold cysts gradually worsened with age, and was significantly greater for children with vocal fold nodules. Fundamental frequency increased in both voice disorders.

**Conclusion:** The significant variation from normative values that occurs means that this software could be used to diagnose children and monitor their response to surgical intervention.

**0237: GLOBUS PHARYNGEUS IN THE ENT OUTPATIENT CLINIC: A RETROSPECTIVE REVIEW OF 103 PATIENTS**
Gabriel Y. Cao, Panagiotis Asimakopoulos, Kim W. Ah-See, University of Aberdeen, Aberdeen, UK; Department of Otolaryngology Head & Neck Surgery, Aberdeen Royal Infirmary, UK.

**Introduction:** To estimate the incidence of globus pharyngeus in a general ENT outpatient clinic (OPC) and evaluate the appropriate use of proton pump inhibitors (PPIs) and other NHS resources.

**Methods:** Retrospective review of 103 patient case notes seen between January - February 2013 at a tertiary referral centre general ENT OPC. Results: 103 out of a total of 1199 (8.6%) patients presented with globus pharyngeus and no identifiable underlying pathology. 42/103 (41%) were started on PPIs by ENT. Only 18/42 (43%) were prescribed PPIs appropriately. Only 13/42 (31%) of patients on PPIs were advised on appropriate duration of treatment. 28/103 (27%) of globus patients were referred to Speech and Language Therapy (SALT) or were given appropriate lifestyle advice. 31/103 (30%) underwent further investigations (e.g. barium swallow) and 27/103 (26%) were given further outpatient clinic follow-up.

**Conclusions:** The lack of understanding behind globus type symptoms leads to inappropriate investigations and treatment. Management of globus type symptoms should first focus on lifestyle modification and appropriate referrals to SALT due to the potential long term side effects of PPI treatment. An evidence based management protocol for the management of globus patients should be implemented.