# Tonsillectomy in Obstructive Sleep Apnoea Dr G Lodwick (ST7); Dr A Moriarty(Cons) Birmingham Children's Hospital

#### Introduction

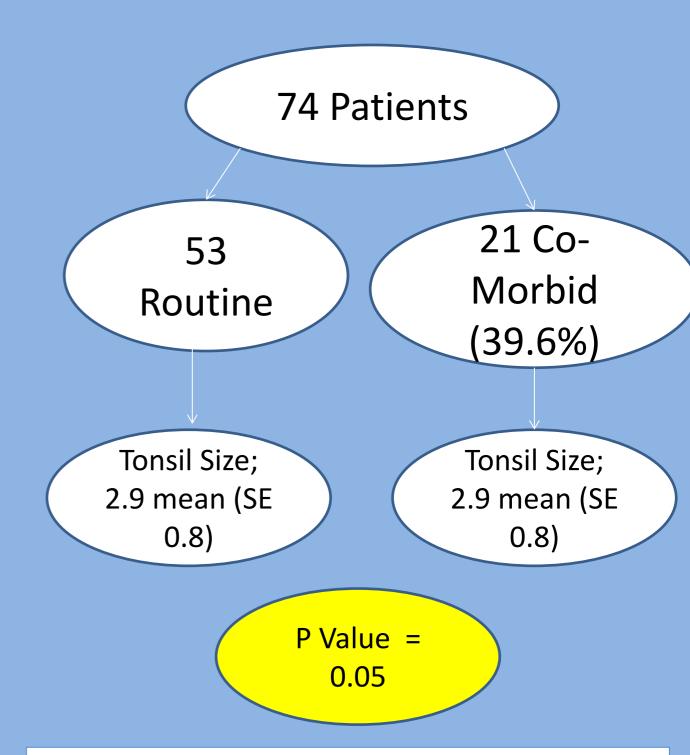
- Tonsillectomy is recommended by ENTUK and the Royal College of Surgeons for the treatment of obstructive sleep apnoea (OSA) in children.
- Amongst our patient population we frequently see patients with multiple co-morbidities.
- Some of these co-morbidities are also potential explanations for OSA alongside the need for tonsillectomy.
- As a procedure it is often painful in the immediate few postoperative days and carries risk of morbidity.
- Audit into percentage of our patient population undergoing tonsillectomy that had possible other explanations for OSA.
- We also scored the size of the tonsils in each patient group to assess if there was any difference

### **Method**

- We audited a single ENT list over the course of 6 months; the list is anaesthetised by a single consultant anaesthetist who assessed the patients for their co-morbidities and their tonsil size on intubation.
- We used this data to assess what proportion of patients had significant other comorbidities and possible other explanations for OSA and to assess the difference in tonsillar size between the two groups

#### **Results**

- 74 patients were anaesthetised by the same consultant anaesthetist on a single list.
- 53 patients were routine, 21 patients had significant co-morbidity, 39.6%.
- Tonsil size for the routine patients was graded at 2.9 mean SE 0.8 and for the co-morbidity group 2.1 SE 0.9
- This gives a P value of 0.05 suggesting the comorbidity group have statistically significant smaller tonsils on removal.



## **Discussion**

- This audit is not to suggest tonsillectomy is inappropriate in some of these cases, as we have not assessed improvement in symptoms following.
- It was designed to look at the workload of a tertiary referral service and assess the indications for this procedure which is often painful and carries morbidity on its own.
- We were able to show a statistically significant difference in the tonsil size between the two groups, with smaller tonsils being present in the group with significant co-morbidity.
- This could mean that it takes a smaller size of tonsil to cause OSA in this group, or suggest the cause is from other co-morbidity and symptoms may not be improved.
- We will use these results to discuss with surgeons their case load and potentially increase the audit to question change in symptoms following the procedure.