

## Audit

# Scottish Intercollegiate Guidelines Network (SIGN) guidelines on tonsillectomy: a three cycle audit of clinical record keeping and adherence to national guidelines

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### Abstract

Scottish Intercollegiate Guidelines Network (SIGN) guidelines on the indication for tonsillectomy in the management of sore throat were published in January 1999. To determine adherence to these guidelines in our unit, clinical records were examined on admission for tonsillectomy. Three cohorts were analysed. The first listed prior to SIGN, the second after SIGN and the third after presentation of the results of cohorts 1 and 2. The records were examined for documentation of the number of attacks of tonsillitis in the preceding year. The first cohort revealed poor documentation of attacks of tonsillitis (30 per cent). The subsequent cohorts showed progressive improvement in record keeping (74 per cent and 96 per cent). The adherence to SIGN guidelines for those with adequate documentation also improved (75 per cent, 80 per cent, 93.5 per cent). The importance of adequate record keeping to enable audit of practice and the impact of national guidelines on practice are discussed.

**Key words:** Evaluation Studies; Tonsillitis; Tonsillectomy; Guidelines

### Introduction

Tonsillectomy is a common childhood surgical procedure.<sup>1</sup> The decision to operate has previously been a matter of clinical judgement and not based on scientific evidence. SIGN guidelines on the management of sore throat and indications for tonsillectomy were published in January 1999.<sup>2</sup> These were based on a systematic review of current scientific literature and included specific recommendations for tonsillectomy (Table I). Our audit was designed to assess the adherence to SIGN guidelines in the practice of an otolaryngology department in a specialist children's hospital.

Adequate clinical record keeping is required in order to assess clinical practice and this was also audited in the study.

TABLE I  
SIGN CRITERIA FOR TONSILLECTOMY

Sore throats due to tonsillitis
Five or more episodes of sore throat per year
Symptoms for at least a year
The episodes of sore throat are disabling and prevent normal functioning

### Materials and methods

This audit was based in the otolaryngology department of a specialist children's teaching hospital. Three cohorts were assessed containing 60, 61 and 60 patients respectively. The clinical records of the patients were examined, at the time of admission for tonsillectomy, for the recording of the number of attacks of tonsillitis suffered in the preceding year. The first cohort of patients had been listed for surgery prior to publication of SIGN and the second after SIGN. The results from these two cohorts were presented to the relevant clinicians and, to encourage compliance, a reminder poster placed in each out-patient room prior to the third cohort. No standard currently exists for record keeping and adherence to SIGN guidelines but a figure greater than 95 per cent was taken as the target.

### Result

Cohort 1 consisted of 60 consecutive admissions. Twenty (33.3 per cent) patients were listed for reasons other than recurrent tonsillitis. Of the remaining 40 patients 12 (30 per cent) had the number of attacks of tonsillitis documented. The average number of attacks per patient was 5.7/year

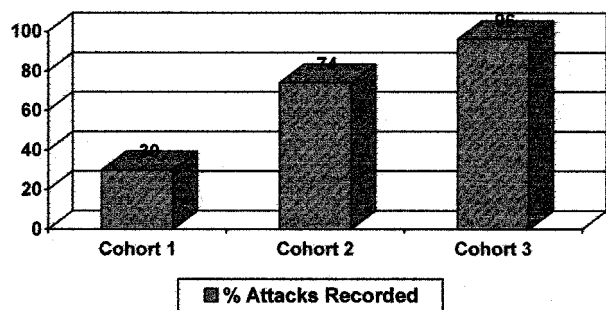


FIG. 1

Recording of attacks of tonsillitis.

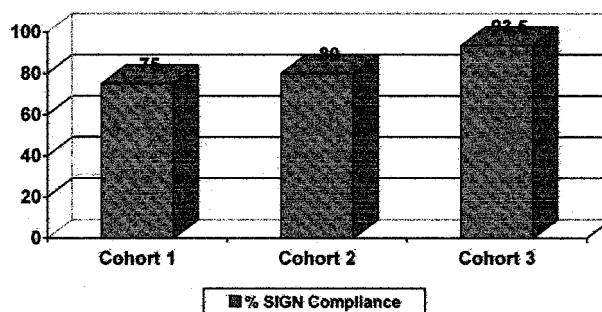


FIG. 2

Patients listed compliant with SIGN guidelines.

and eight (75 per cent) complied with SIGN recommendations. Cohort 2 consisted of 61 admissions. Seven (11.5 per cent) were listed for reasons other than recurrent tonsillitis. Forty (74 per cent) of the remaining 54 had attacks documented. The average number of attacks was 6.9/year and 32 (80 per cent) complied with SIGN. The third cohort contained 60 admissions. Twelve (20 per cent) were listed for reasons other than tonsillitis. Forty-six (96 per cent) of the remaining 48 had attacks documented. The average was 6.5/year and 43 (93.5 per cent) complied with the guidelines. The improvement in record keeping was significant between each cohort (Chi-squared test with Yates' correction, Cohort 1 to 2  $p < 0.001$ , Cohort 2 to 3  $p < 0.01$ ) (Figure 2). The apparent improvement in adherence to SIGN guidelines was not statistically significant (Chi-squared test with Yates' correction  $p < 0.2$ ) (Figure 3). Those listed for tonsillectomy for reasons other than tonsillitis had obstructive airway problems.

## Discussion

Tonsillectomy was the most common NHS operation in children in Scotland in 1990.<sup>3</sup> Variation in operation rates for recurrent sore throats across Scotland have been demonstrated.<sup>4</sup> The publication of SIGN guidelines on the management of sore throat and indications for tonsillectomy provides a framework for evaluation of local practice.<sup>2</sup> In order to audit local practice the relevant information must be recorded in the clinical records of patients. This audit demonstrated very poor record keeping prior to the publication of SIGN guidelines, inadequate to enable audit of clinical practice. Following publication the record keeping improved. This would suggest that awareness of the guidelines encourages more specific recording of clinical data. Direct reporting of the results of cohorts 1 and 2 to the relevant clinicians with the addition of reminders placed in the out-patient clinic rooms resulted in a

further improvement in record keeping into the target range of >95 per cent for cohort 3. This illustrates the value of targeted audit in improving practice.

Adherence to the SIGN guidelines was generally good throughout the audit. The apparent improvement was not statistically significant.

## Conclusions

Publication of specific national guidelines appears to improve awareness and encourage recording of clinical criteria. Targeted audit is a useful adjunct to further improve local practice.

## References

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