The Journal of Laryngology & Otology (2012), ***126***, *609–611*.
© JLO (1984) Limited, 2012
doi:10.1017/S0022215112000643

MAIN ARTICLE

Tonsillectomy under threat: auditing the indications for performing tonsillectomy

S SILVA[1], M OUDA[1], S MATHANAKUMARA[1], E RIDYARD[2], P MORAR[1]

[1]*Department of Otolaryngology – Head and Neck Surgery, Royal Blackburn Hospital, and* [2]*Medical School, Manchester University, UK*

Abstract

Background: The 2009 McKinsey National Health Service report considered that tonsillectomy was relatively ineffective and often unjustified, and that its frequently could be greatly reduced. ENTUK argued against this, for severe recurrent tonsillitis. This study audited clinical indications for tonsillectomy.

Criteria and standards: Current guidelines state that patients with recurrent tonsillitis must have disabling sore throat episodes five or more times per year, and symptoms for at least a year, to justify tonsillectomy.

Methods: Seventeen recurrent tonsillitis patients receiving tonsillectomy were audited prospectively. Indications were poorly documented in the referral letter, so surgeons agreed to list specified tonsillectomy criteria when scheduling patients for tonsillectomy. A pro forma reminder was distributed to all clinics, and the next 100 scheduled tonsillectomy patients were audited.

Results: In the first audit, all 17 tonsillectomies were justified but only two (11.8 per cent) had documented indications. In the second audit, 85 per cent of patients had all essential criteria, which were documented in the listing letter.

Conclusion: Tonsillectomy risks being removed from the UK essential otolaryngological surgical register, risking increased patient morbidity and work absence, despite valid supporting evidence of efficacy for recurrent tonsillitis. All UK otolaryngology units should strictly adhere to the ENTUK and Scottish Intercollegiate Guidelines Network recommendations for tonsillectomy, and should document essential criteria in the listing letter, to strengthen the advocacy argument for tonsillectomy as essential, valid treatment for recurrent tonsillitis.

Key words: Tonsillectomy; Pharyngitis; Tonsillitis; Guideline Adherence; Cost Savings; Sign Guidelines; McKinsey Report

Introduction

In February 2009, McKinsey & Company (a global management consulting firm) was commissioned by the Department of Health to analyse, and to advise how to reduce, National Health Service (NHS) spending, in light of increasing costs of healthcare and the global economic recession.

Recommendations were announced in March of the same year, and included the decommissioning of some surgical procedures with limited clinical benefit, with a calculated potential saving of £0.3–0.7 billion across England. McKinsey reported that tonsillectomy was at the top of the list of interventions that were ineffective (Table I).

Consequently, it was calculated that reducing tonsillectomy procedures by 90 per cent could result in a potential saving of approximately £45.1 million. This implied that there was no evidence base to justify tonsillectomy as beneficial for patients with recurrent tonsillitis, and implied that otolaryngologists were scheduling and performing tonsillectomies unnecessarily.

In response, ENTUK (the British association for otorhinolaryngologists) published a position paper on the indications for tonsillectomy, defending it as an effective procedure for recurrent tonsillitis. Published statistical data has shown that the incidence of tonsillectomy has fallen dramatically in all age groups in the last 15 years, demonstrating that otolaryngologists have become much more conservative in their consideration of which patients ought to be offered the procedure, reserving surgery for only the most severely affected.[1]

In addition, the Scottish Intercollegiate Guidelines Network has developed evidence-based clinical practice guidelines for the indications for tonsillectomy, derived from a systematic review of the scientific

Presented, and awarded first prize, at the Clinical Audit and Practice Advisory Group (APAG) Annual Audit and Evidence-based Medicine Meeting, 10 September 2010, Coventry, UK
Accepted for publication 20 September 2011 First published online 30 April 2012

https://doi.org/10.1017/S0022215112000643 Published online by Cambridge University Press

TABLE I

MCKINSEY REPORT RECOMMENDATIONS: RELATIVELY INEFFECTIVE INTERVENTIONS

Intervention	Potential reduction (%)		Potential saving (£m)	
	Min	Max	Min	Max
Tonsillectomy	10	90	5	45.1
Spinal cord stimulation	0	50	0	25.2
Back pain injection & fusion	20	90	5.3	23.7
Grommets	10	90	2.3	20.6
Knee washout	20	90	4.5	20.3
Trigger finger release	10	33	1.8	5.8
D&C, women <40 y	10	70	0.4	2.5
Jaw replacement	5	10	0.5	0.9

Min = minimum; max = maximum; D&C = dilation and curettage; y = years

literature on improving surgical outcomes important to patients.[2] The Scottish Intercollegiate Guidelines Network guidelines (see Table II) have been endorsed by ENTUK, and all otolaryngologists have been recommended to strictly adhere to them as criteria for scheduling patients for tonsillectomy.

Thus, we performed a prospective audit cycle to investigate whether our department was following these guidelines.

Methodology

Initially, we assessed our current practice and performed a prospective audit of the next 17 patients scheduled for tonsillectomy. We assessed the listing letter sent by the otolaryngologist to the general practitioner, noting whether the Scottish Intercollegiate Guidelines Network criteria had been documented, and if so how many, in order to justify the decision to offer the operation to the patient. This gave us an indication of our patient selection, and the documentation quality of our current practice. Subsequently, we made necessary changes (see below) and then performed another audit, including the next 100 tonsillectomy patients, to assess whether the changes had resulted in improvements.

In order to improve our practice, we designed a pro forma and distributed it to all our clinics. This pro forma included the four Scottish Intercollegiate Guidelines Network criteria. Each clinician was asked to record which criteria were present, along with the final management decision, for patients with recurrent tonsillitis.

TABLE II

SIGN TONSILLECTOMY GUIDELINES

Sore throats due to recurrent tonsillitis
≥5 episodes of sore throat per year
Symptoms for at least 1 year
Sore throat episodes disabling & prevent normal functioning

Patients with recurrent tonsillitis must have all four of the above indications to justify being offered a tonsillectomy. SIGN = Scottish Intercollegiate Guidelines Network

Our first audit revealed that, although all the audited patients had all the necessary criteria in order to justify being listed for tonsillectomy, as noted in their clinical records, only two of these cases had well documented criteria included in the letter sent to their general practitioner. This serious documentation shortcoming was obviously alarming, as it created the impression that we were scheduling patients for tonsillectomy unnecessarily, when in fact this was not the case as they all had the required indications (according to the Scottish Intercollegiate Guidelines Network guidelines).

Therefore, at our departmental audit meeting we agreed that we should clearly document all relevant criteria reported by recurrent tonsillitis patients, and that these criteria should be clearly listed in letters sent to patients' general practitioners.

We then undertook a second audit in order to assess the effect of our change of practice.

Results

Our first audit included 17 patients scheduled for tonsillectomy. We found that all of them had sufficient Scottish Intercollegiate Guidelines Network criteria documented in their clinical records to justify tonsillectomy. However, only two patients (11.8 per cent) had all the relevant criteria documented in the typed listing letter sent to their general practitioner (Figure 1). Thus, patients' general practitioners may have received the false impression that we were scheduling their patients for tonsillectomy unnecessarily.

As a result of these audit results, we agreed at a departmental audit meeting that our department should make every effort to document all relevant Scottish Intercollegiate Guidelines Network criteria in general practitioner listing letters, in order to demonstrate the reasons why patients would benefit from tonsillectomy.

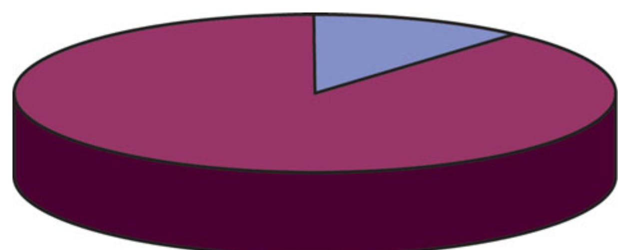

FIG. 1

First audit: documentation of Scottish Intercollegiate Guidelines Network (SIGN) tonsillectomy criteria in patients' general practitioner listing letters.

https://doi.org/10.1017/S0022215112000643 Published online by Cambridge University Press

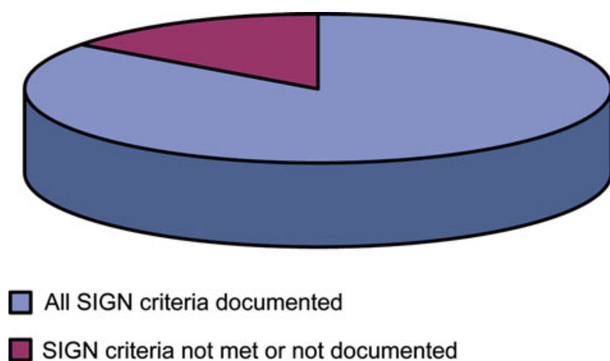

FIG. 2

Second audit: documentation of Scottish Intercollegiate Guidelines Network (SIGN) tonsillectomy criteria in patients' general practitioner listing letters.

In the second audit, we prospectively assessed patients referred for sore throat, until 100 patients had been scheduled for tonsillectomy. One hundred and sixty-eight patients were seen for sore throat, of whom 100 patients were scheduled for tonsillectomy. Of these 100 patients, 85 had all the Scottish Intercollegiate Guidelines Network criteria present and clearly documented in their general practitioner listing letter. The remaining 15 patients either had not met the Scottish Intercollegiate Guidelines Network criteria or did not have these clearly documented in the general practitioner listing letter (Figure 2).

- **Some reports consider tonsillectomy to have limited clinical benefit**
- **Scientific evidence shows tonsillectomy to be of significant benefit in correctly selected patients**
- **Tonsillectomy decisions should follow Scottish Intercollegiate Guidelines Network criteria**
- **The presence of these criteria should be consistently documented in correspondence**

Patients who were not scheduled for tonsillectomy were either discharged (48 patients), asked to come back for review (17 patients) or sent for a sleep study (three patients).

Conclusion

Tonsillectomy for severe, recurrent tonsillitis is extremely successful and valid in achieving a permanent cure for sufferers. The use of tonsillectomy in less frequent and milder cases is questionable, and the risks of the operation may not justify its benefits.[3–6]

In light of the McKinsey report, which condemned the operation without quoting any scientific evidence, and proposed government NHS spending restrictions, tonsillectomy is at risk of being removed from the essential otolaryngological surgical register. This rather excessive step would have a huge effect in terms of patient morbidity and work absence due to recurrent tonsillitis and its complications (e.g. peritonsillar abscess).

Our audit cycle demonstrated that, initially, our departmental otolaryngologists' tonsillectomy decisions were justified but inadequately documented in correspondence to the patient's general practitioner.

To prevent unfounded criticism, we implore all UK otolaryngologists to pay particular attention when writing their tonsillectomy listing letter to the patient's general practitioner, and to list all tonsillectomy indications in accordance with the Scottish Intercollegiate Guidelines Network criteria.

References

1 ENTUK. Indications for Tonsillectomy: Position Paper. London: ENTUK, 2009
2 ENTUK. SIGN Guideline No. 34 Management of Sore Throat and Indications for Tonsillectomy 1999. London: ENTUK, 1999
3 Paradise JL, Bluestone CD, Bachman RZ, Colborn DK, Bernard BS, Taylor FH *et al*. Efficacy of tonsillectomy for recurrent throat infection in severely affected children. Results of parallel randomized and nonrandomized clinical trials. *N Engl J Med* 1984;**310**:674–83
4 McKee WJ. A controlled study of the effects of tonsillectomy and adenoidectomy in children. *J Br Soc Prev Med* 1963;**17**:49–69
5 Mawson SR, Adlington P, Evans M. A controlled study evaluation of adenotonsillectomy in children. *J Laryngol Otol* 1967;**81**:777–90
6 Roydhouse N. A controlled study of adenotonsillectomy. *Arch Otolaryngol* 1970;**92**:611–6

Address for correspondence:
Mr Mohamed Ouda,
Royal Blackburn Hospital,
Haslingden Road,
Blackburn BB2 3HH, UK

E-mail: mohamed.ouda10@yahoo.com

Mr S Silva takes responsibility for the integrity of the content of the paper
Competing interests: None declared

https://doi.org/10.1017/S0022215112000643 Published online by Cambridge University Press