Is SIGN Guidance for GP management of tonsillitis suitable? A qualitative study.

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Key messages

- GPs are enacting current guidance and referred patients have an expectation of tonsillectomy
- GPs feel patients may be denied access to tonsillectomy by the current stringent criteria
- GPs are unlikely to refer patients to ENT unless it is requested

Abstract

Background

The Scottish Intercollegiate Guidelines Network developed guidelines for the management of sore throat and indications for tonsillectomy in 1999 to address concerns of unnecessary surgery. Emergency admissions to hospital for tonsillitis have since increased. Adults experience an average of 27 episodes of tonsillitis before undergoing tonsillectomy. We wished to explore the appropriateness of the guidance and/or its implementation in primary care

Aim

To explore the attitudes of GPs to the referral criteria they use when managing adults presenting with acute tonsillitis.

Design

Secondary analysis of qualitative data from the NAtional Trial of Tonsillectomy in Adults (NATTINA) feasibility and process evaluation.

Participants and setting

Twenty-one GPs from practices throughout the UK.

Method

In-depth interviews GPs concerning both the feasibility and process evaluation phases of NATTINA. Analysis was conducted using the Framework method.

Results

General practitioners felt it was rarely necessary to refer patients. They were aware of guidelines and would refer if requested by a patient who fulfilled the guidelines criteria and/or who were missing considerable amounts of work.

Conclusion

The introduction of the guidelines appears to coincide with what some may have hoped to be a desired effect of reducing adult sore throat referrals and subsequent tonsillectomies by increasing the

number of episodes a patient must suffer before the referral threshold is met. GPs may find equipoise for tonsillectomy referral challenging as many patients, express a strong preference for surgery. We believe this paper reinforces GP professionalism, patient-centred consultations and challenges the role of clinical guidelines.

Keywords

General Practice, Family Practice, Tonsillitis, Tonsillectomy, Referral and Consultation

Background

Recurrent adult tonsillitis is a debilitating condition with an annual UK incidence of 37 per 1000 [1]. Patients' experiences of recurrent sore throats impinge significantly on lifestyle through incapacitating physical symptoms and impact on work, family and social life [2]. Excessive absences from work can, in turn, effect productivity, promotion status and even employability [3]. Patients describe how absences have triggered formal work enquiries and episodes of 'struggling on' at work while not 'feeling one hundred per cent' [2]. Tonsillectomy, the surgical treatment for recurrent tonsillitis, is a painful procedure [4] requiring two weeks off work [5,6], but with evidence from the Glasgow Benefit Inventory [7], patients report significant quality of life benefit [1,3,7]. Available evidence reveals tonsillectomy to be an effective treatment resulting in decreased medical resource utilisation and missed work days[3,8-12]. Nonetheless, despite being one of the most commonly performed surgical procedures in the UK [1], the clinical evidence for adult tonsillectomy remains unclear [13].

The National Health Service (NHS) spends over £120 million annually on sore throats, including £60 million on General Practitioner (GP) consultations and medical therapy [2]. Decision-making for recurrent sore throats is largely in primary care where there is greatest potential for evolution in the patient pathway. In the 1990s, concerns were raised that many tonsillectomies were unnecessary with NHS cost and patient morbidity consequences [14]. In response, the Scottish Intercollegiate Guidelines Network (SIGN) developed SIGN 34 in January 1999 [14]. SIGN 34 outlines appropriate indications for tonsillectomy in both children and adults with recurrent tonsillitis. [15] The indications for tonsillectomy remained unchanged in 2010 (SIGN 117) [14]. The aim of clinical guidelines is that their use will reduce inappropriate practice and improve efficiency [16]. The aim of the SIGN 34 guidelines and criteria for consideration of referral for tonsillectomy are shown in box 1.

Box 1: Aim and criteria of SIGN 34 guidelines

Aim

'To suggest a rational approach to the management of acute sore throat in general practice and to provide criteria for referral for tonsillectomy in recurrent tonsillitis…the guideline is not intended to be construed or to serve as a standard of care. Standards of care are determined on the basis of all clinical data available for an individual case and subject to change as scientific knowledge and technology advance and patterns of care evolve. The ultimate judgement must be made by the appropriate healthcare professional(s).' [15, p.2]

Criteria

- *'Surgical management – tonsillectomy is recommended for recurrent severe sore throat in adults'*
- The following are recommended as indications for consideration of tonsillectomy for recurrent sore throat in both children and adults:
    - *'Sore throats are due to acute tonsillitis'*
    - *'The episodes of sore throat are disabling and prevent normal functioning'*
    - *'Seven or more well documented, clinically significant, adequately treated sore throats in the preceding year'*

      or
    - *'Five or more such episodes in each of the preceding two years'*

      or
    - *'Three or more such episodes in each of the preceding three years'* [15, p.15]

The uncertainty surrounding the role of adult tonsillectomy for recurrent sore throat is compounded by UK primary care restrictions of referrals for treatments they deem to be of limited clinical value with tonsillectomy ranked top as a 'relatively ineffective' procedure [17]. In 2009 ENT UK highlighted increasing emergency admissions for tonsillitis and its complications, and suggested that too few tonsillectomies were being undertaken. The body further pointed out that the UK had the lowest tonsillectomy rates in Europe [14]. A study conducted in 2013 [14] analysed the trends in population rates of tonsillectomy and hospital admissions for tonsillitis and peritonsillar abscess in England, Scotland and Wales following the SIGN guideline implementation [14]. It was reported that the population rate of

tonsillectomy in Wales reduced over the study period and in England between 2003 and 2010 but not in Scotland during these time periods. The authors concluded that the implementation of the SIGN guidelines may have had different results on different cohorts. They also identified potential confounding variables, notably antibiotic prescribing [14].

As part of the NAtional Trial of Tonsillectomy IN Adults (NATTINA) feasibility study [2,18] and the main NATTINA trial process evaluation [19], GPs were interviewed on their views of the sore throat patient pathway process and treatment as well as of the NATTINA trial.

Objectives

The aim of this NATTINA qualitative work stream was to evaluate the appropriateness of the SIGN 34/117 guidelines and the impact on patients' referral to ENT.

Methods

Design

Secondary analysis of in-depth qualitative interviews with GPs from both the NATTINA feasibility study and process evaluation.

Setting and sample

In the feasibility study, a convenience sample of GPs located in the original nine UK NATTINA trial sites were identified by the Clinical Investigator (CI) and local site ENT consultants. In the process evaluation, a purposive sample of GPs who had patients taking part in the NATTINA trial were identified through trial records. Sample size was determined by reaching data saturation whereby no new themes emerged in three consecutive interviews[20]. All GPs were contacted by LM and provided with a participant information sheet before being invited to participate in a telephone interview. Verbal consent was taken at the time of the interview and signed written consent returned post-interview.

Interviews

Semi-structured interviews were based on flexible topic guides derived from the literature, issues raised by the NATTINA Patient and Public Involvement group and in conjunction with the study otolaryngologist and GP (available on request). Themes explored included: effects and management of recurrent sore throat, treating sore throats, and referral process. This paper reports findings

concerning the referral process including the use of the SIGN guidelines [15] to determine their acceptability and appropriateness for ENT referral for tonsillectomy.[15]

Data management and analysis

Interviews were digitally audio-recorded and transcribed verbatim. Framework analysis, which is defined by a matrix output: rows (cases), columns (codes) and 'cells' of summarised data [21], was adopted as a recommended approach for qualitative health research with objectives linked to quantitative investigation [22]. Using a framework method allows for transparency of coding and the analysis is designed so that it can be viewed and assessed by other members of the team as well as the primary analyst [22]. NVivo software was used to aid coding [23]. Data were repeatedly read and coded by LM within a framework of a priori issues, those identified by participants or which emerged from the data. To minimise researcher bias, emergent themes were discussed with the qualitative lead (CH) and the study team. Findings from the feasibility study and the process evaluation were collated as similar themes relating to the referral process and SIGN guidelines were apparent. Each theme discussed is represented here by a single illustrative quote.

Results

Participants

In total 21 GPs were interviewed. In the feasibility trial 39 GPs were contacted by email or telephone, 12 (31%) responded and consented to be interview. Of the 39 contacted, 1 stated they were unavailable, 25 (64%) did not respond and, 2 email addresses were not recognised. In the main trial 181 GPs were contacted either by telephone call to the practice or by letter inviting them to participate in an interview. Nine GPs (5%) consented to an interview. Of the 181 contacted, 17 GPs responded citing they were unable to participate due to time constraints, 5 GPs had left the practice/retired, 2 patients had left the practice, 4 practice managers acted as gate-keepers denying access and there were 142 non-responders (78%).

GP Referral process emergent themes

The findings are grouped by the main themes; a selection of GP responses are presented after each section in boxes.

GPs adhere to usual surgery practice

There was an overwhelming sense that GPs very rarely referred patients to Ear, Nose and Throat (ENT) departments for consideration of a tonsillectomy; this was considered to be normal practice. There was variation in antibiotic prescribing practice for recurrent sore throats, however most seemed to discourage their use. The need to record the number of episodes of sore throat was discussed as was a requirement to determine the aetiological cause of the sore throat (bacterial or viral). GPs spoke extensively about using Centor Criteria [24] or throat swabs for antibiotic use; and SIGN guidelines if a referral was considered necessary or requested by the patient. Patients were mostly encouraged to self-manage their symptoms.

Box 2: GPs adhere to usual surgery practice quotations

"People are aware we don't give antibiotics anymore unless there are specific indications for it"
"Our practice like them to self-manage, treat yourself first…referral is very rare".
"Then we do swabs, especially if people are mentioning that they want referral for tonsillectomy…that's what I certainly would do"

GPs have negative views of tonsillectomy

Discussion of adult tonsillectomy procedures elicited fairly negative responses. Tonsillectomy was viewed as a dangerous, painful procedure with negative consequences. There was a belief that not only would patients be reluctant to go through or expect the procedure but that the procedure was rarely performed. However, there were a minority who believed that those patients with chronic recurrent tonsillitis were getting the treatment they needed. Furthermore, thinking of patients who had had a tonsillectomy, one GP reported his patients as being glad to have gone through with the procedure however, this was an isolated view.

Box 3: GPs have negative views of tonsillectomy quotations

"There's a fatality associated with tonsillectomy…so it's not something to be taken lightly"

"ENT are quite reluctant to take tonsils out"

"I don't think that tonsillectomies are being done as often as they used to be. Patients don't seem to be expecting them as often"

"You're just putting somebody at risk. So, I'm aware that tonsillectomy is not something which is done lightly and I try and say to people. So, I hardly ever refer"

GPs only refer on patient request, if their work is affected and if they fit the criteria

GPs were asked to consider what might be the trigger for a referral to ENT. Conversations about referrals were most likely to be initiated by the patient. If a patient requested a referral the GP would consider the number of bacterial throat infections suffered, how much time the patient had missed from work and/or education and whether they had required frequent courses of antibiotics. GPs were asked if they felt patients had an expectation of surgery; some felt that patients would start mentioning surgery after suffering a few episodes. Patients who 'fit the criteria' through the required number of episodes or those whose episodes were '*making their life a complete and awful misery'* would be considered for a referral. However, the recording of episodes and 'fitting' of the criteria posed further challenges. Some GP practices required medically recorded number of episodes, whilst others accepted the patient's self-monitored records. This produced difficulties for the GP to accurately quantify episodes to compare with the referral criteria. Moreover, the differentiation of the types of sore throat episodes – bacteria or viral also complicated recording of episodes.

Box 4: GPs only refer on patient request, if their work is affected and if they fit the criteria quotations

"Usually the patient will request to be seen…it's not something I would generally offer"

"That is a driver, when they are off work a lot"

"Some people think they're going to get surgery after two or three bouts…that's not going to happen"

"If they fit the criteria, I would never have any qualms about referring them"

"It can be difficult to quantify when patients are using various different clinical settings to get their treatment"

"They'll count viral sore throats as an episode of tonsillitis and then they might be pushing towards treatment"

GPs demonstrate knowledge of SIGN and local guidelines

Despite GPs stating that they rarely referred recurrent sore throat patients to ENT there was an awareness of the SIGN guidelines. Most GPs stated they would have to refer to guidelines to remind them of the criteria but were able to name some details. The use of 'quick reference' guides was favoured and were found to be useful as a quick edited version. GPs also often referred to 'local' guidelines which are based on the SIGN guidelines but may differ slightly between clinical commissioning groups and NHS boards.

Although the criteria for tonsillectomy referral between SIGN 34 and SIGN 117 remained unchanged[14], there was a perception that the threshold criteria had changed. GPs may have been referring to local guidelines; however there was some uncertainty over the perceived 'changes' as to where they originated.

Box 5: GPs demonstrate knowledge of SIGN and local guidelines quotations

"I'm aware of things like the SIGN guideline group looking at the treatment of tonsillitis and tonsillectomy…and on rare occasions perhaps indications for referring someone"
"Well I can't remember exactly the details of the SIGN guidelines, but I think the essence is if they're getting like more than 6 episodes a year and it's being disruptive with school or with their work…those would be the main markers in my mind"
"Most of what we do would be guided, I suppose, essentially through what the local department's guidelines are"
"I know the threshold is much higher than it used to be…I work on a rule of thumb of 6 episodes of acute tonsillitis in a year"
"It might well just be based on the SIGN guidance, in which case it's not changed, we're just being given a message that it's more difficult when actually it's the same"

GPs only refer to ENT for a consultation

Despite GPs feeling that some patients had an expectation of surgery, there was an emphasis that any referral to ENT would be for a specialist opinion only. Several GPs reported that any referral letters which were sent to ENT would clearly state that they were requesting an opinion on the patient's condition despite them believing the patient had fulfilled the SIGN or local criteria.

Box 6: GPs only refer to ENT for a consultation quotations

"If they want a referral, I would talk to them about how it's not my decision on having the tonsils removed, it still depends on the consultant and their team…so it's a referral rather than a referral for a tonsillectomy"
"I don't see them referring them up for a tonsillectomy, I see them referring them up for an opinion about whether it would be appropriate or not"

Conclusions

The findings from this qualitative study indicate that referral to ENT was an uncommon occurrence. GPs appeared quite negative about the role surgery had in the treatment of tonsillitis. The process of

documenting sore throat episodes was problematic, with some practices accepting patient-recorded episodes and other requiring the aetiology of the sore throat to be determined and medically recorded. It was apparent that GPs were increasingly using throat swabs to differentiate viral from bacterial infections. There was some consensus among the GPs that the thresholds for referral had become more stringent.

Previous qualitative work highlights the issue of tonsillectomy being classed as a procedure of 'limited clinical value' and of NHS practice boards encouraging GPs to reduce referral rates for such procedures [2]. Moreover, perhaps due to this pressure, GPs are required to follow a rigorous vetting process in the form of local and national guidelines for the treatment of recurrent sore throat. The SIGN guidance [15] and ENT UK Commissioning guide for tonsillectomy [25] both highlight the need for significant sore throat symptoms to be documented prior to referral and recommend seven or more documented episodes in the preceding year as one criteria. However, NICE guidance [26] recommend that adults should be referred if they have had five, not seven or more episodes in the previous year. The guidance for throat swabs is also mixed; NICE state that throat swabs have poor sensitivity with expensive analysis techniques [26], whereas the SIGN guidance report that swabs may be used to establish aetiology of recurrent severe episodes when considering referral for tonsillectomy [15]. Furthermore, it is acknowledged that the differentiation of the aetiology in practice is difficult as a patient will not always present to the GP with sore throat symptoms [26]. The ENT UK commissioning guide state that 'a fixed number of episodes may not be appropriate for children and adults with severe or uncontrolled symptoms' [27]. A recent study exploring the morbidity associated with recurrent tonsillitis reported, that on average, patients are having to wait 7 years with an average of 27 episodes of tonsillitis before 'achieving' tonsillectomy [1]. Otolaryngologists surveyed in Scotland in 2004 agree with our GPs that thresholds for referral had become more stringent [28]. It would seem that patients are having to face many barriers and years of suffering severe symptoms in the process [18].

Guideline development groups have been criticised for failing to take into account the overall picture presented by a body of evidence and to apply sufficient judgement to the overall strength of the evidence base and its applicability to the target population of the guideline [29]. Moreover, it has been reported that guideline users can be unclear about the implications of the grading system with the grade of the recommendation being misinterpreted as relating to its importance, rather to the strength

of the supporting evidence [29]. A particular criticism of SIGN 34 is its failing to consider the impact of the disease process (tonsillitis) on the patient's quality of life and the severity of the symptoms [28].

It was reported that despite GPs only referring patients whom they felt fulfilled the guideline criteria, they did not give their patient the expectation that they would automatically receive a tonsillectomy. This is contrary to previous work; patients felt they had to wait a significant period of time to be referred to ENT. Having already discussed the possibility of further treatment (usually a tonsillectomy) with their GP; the expectation that they would then receive surgery was high [18].

Implications for practice

Although the introduction of the guidelines set a criterion for where tonsillectomy might be considered, it would seem the focus for referral is weighted heavily on the number of episodes a patient must suffer. As critics of the guidelines have alluded to, this does not consider the impact of the disease on the patient's quality of life. The GPs in this study acknowledged that a referral would not normally be considered without the patient raising the subject. GPs may find equipoise for tonsillectomy referral challenging as many patients, having waited so long, will express a strong preference for surgery. We believe this paper reinforces GP professionalism, patient-centred consultations and challenges the role of clinical guidelines.

Strengths and limitations

This study comprised a large qualitative sample (n=21) of difficult to recruit GPs. However, their views may not be representative of all GPs and perhaps those who volunteered to take part had an interest in the treatment of recurrent tonsillitis.

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Ethical approval

Favourable ethical opinion was given by proportionate review subcommittee of the NRES committee – Fulham, London, 16 June 2014 (14/LO/1115). Transcriptions were anonymised and treated with

strictest confidence. All identifying information was removed by giving each participant a unique code which was used to attribute comments during analysis.

Conflict of interests

None to declare.

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