Management of Acute and Recurring Sore Throat and Indications for Tonsillectomy

These recommendations have been derived from a original guideline document produced by the Scottish Intercollegiate Guidelines Network. The full guideline may be obtained at the following website: http://www.sign.ac.uk. This publication presents evidence-based recommendations for the management of acute and recurring sore throat and indications for tonsillectomy for children. Please note that the statements only consider tonsillectomy for recurring sore throat. Although directed to primary care, the recommendations within this guideline are of relevance to all health professionals who care for children with sore throat. The guideline does not address tonsillectomy for suspected malignancy or as a treatment for sleep apnoea, peritonsillar abscess or other conditions. It should be noted that the published literature in this area is mainly concerned with a paediatric population and there is little specific evidence concerning the management of recurring sore throats in adults. The guideline states that a review of the guideline to take into account any new evidence will take place in 2001.

Aims

The aim of the original recommendations is to suggest a rational approach to the management of sore throat in primary care and to provide reasonable criteria for referral for tonsillectomy. Guidelines are ‘systematically developed statements to assist decisions about appropriate care for specific clinical circumstances’ based on systematic reviews of the research literature. Guidelines are not intended to restrict clinical freedom, but practitioners are expected to use the recommendations as a basis for their practice. Local resources and the circumstances and preferences of individual patients will need to be taken into account. Where possible, recommendations are based on, and explicitly linked to, the evidence that supports them. Areas lacking evidence are highlighted and may form a basis for future research.

Background

The management of sore throat in general practice and the further progress to tonsillectomy in a number of cases results in significant use of health service resources. In most cases, the condition is relatively minor and self-limiting. Sore throat has few long-term adverse health effects. However, a significant number of patients experience unacceptable morbidity, inconvenience and loss of education due to recurrent sore throat. As a result patients present to GPs who may actively treat them with antibiotics of questionable efficacy and considerable aggregate cost. Tonsillectomy has an appreciable perioperative morbidity, a complication rate of around 2% and the outcome is as yet undefined.

Potential Economic Benefits

Based on information from the General Practice Administration System for Scotland (GPASS), ‘acute tonsillitis’ is the sixth most common presentation in primary care for girls, the eighth for boys (aged 0-14 years). For all ages acute tonsillitis was the eighth most common acute presentation in 1996, a rate of almost 1 in 30. SIGN has estimated that there are 0.1 consultations per capita per annum regarding sore throat. As a result patients present to GPs who may actively treat them with antibiotics of questionable efficacy and considerable aggregate cost. Tonsillectomy has an appreciable perioperative morbidity, a complication rate of around 2% and the outcome is as yet undefined.
The Role of the Royal College of Paediatrics and Child Health

In order to raise awareness about the existence of the original guideline and to ensure its relevance for children’s health, the College (through its Quality of Practice Committee) assessed the original guideline against the checklist laid out in its ‘standards’ document. Having established the quality of the guideline’s methodology in this way, the College recruited independent reviewers to examine the recommendations presented in the guideline document in the context of the original research papers from which they were derived. These reviewers were expert in both the clinical area under examination and in critically appraising research literature. The reviewers’ findings are presented here. Where discrepancies between their findings and the originals exist, both recommendations have been included. These areas of discrepancy are indicated by the shaded boxes.

The levels of evidence used throughout are those derived from the US Agency for Health Care Policy and Research, 1993 (see below). The College’s appraisal should not be considered valid beyond the end of 2001, and new evidence at any time could invalidate these recommendations.

Please note that those recommendations originally ascribed as Grade C have not been appraised by the College

Grades of Evidence/Derivation of Recommendations

<table>
<thead>
<tr>
<th>Grade A Evidence:</th>
<th>Requires at least one randomised controlled trial as part of the body of overall good quality and consistency addressing the specific recommendation.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grade B Evidence:</td>
<td>Requires availability of well-conducted clinical trials but no randomised clinical trials on the topic of the recommendation.</td>
</tr>
<tr>
<td>Grade C Evidence:</td>
<td>Requires evidence from expert committee reports or opinions and/or clinical experience of respected authorities. Indicates absence of directly applicable studies of good quality.</td>
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Key points for clinical audit

SIGN recommend the following as topic areas suitable for clinical audit:

Management of acute sore throat
- Antibiotic prescription rate for sore throat in general practice
- Number of patient visits to the general practitioner for sore throat symptoms

Referral criteria for surgery
- Criteria for referral to hospital from general practice
- Operation rate with reference to the referral criteria

Admission rates for suppurative complications of sore throat
- Rates of hospital admission for sore throat complication, such as peritonsillitis, quinsy and parapharyngeal abscess
### Presentation
- Sore throat associated with stridor or respiratory difficulty is an absolute indication for admission to hospital
- Practitioners should be aware of underlying psychosocial influences in patients presenting with sore throat

### Diagnosis of sore throat
- Clinical examination should not be relied upon to differentiate between viral and bacterial sore throat
- Throat swabs should not be carried out routinely in sore throat
- Rapid antigen testing should not be carried out routinely in sore throat and it is recommended that research should be undertaken using antibody titres as a 'gold standard'21-26  
  *(Original statement: Rapid antigen testing should not be carried out in sore throat. Grade B)*

### Management of sore throat
- Paracetamol is effective in treatment (in the first 48 hours) of symptoms associated with sore throat
- Ibuprofen is effective in treatment (in the first 48 hours) of symptoms associated with sore throat
- Paracetamol is the drug of choice for analgesia in sore throat, taking account of the increased risks associated with other analgesics

### Antibiotics
- Penicillin appears to have a significant (but relatively small) advantage over antipyretics/analgesics in the early reduction of symptoms in those children with severe symptoms and signs. However, antibiotics should not be used routinely to secure symptomatic relief in sore throat
  *(Original statement: Antibiotics should not be used to secure symptomatic relief in sore throat. Grade A)*
- Sore throat should not be treated with antibiotics specifically to prevent the development of rheumatic fever or acute glomerulonephritis
- Antibiotics may prevent cross-infection with group A beta-haemolytic streptococcus (GABHS) in closed institutions (such as barracks or boarding schools) but should not be used routinely to prevent cross infection in the general community
- The prevention of suppurative complications is not a specific indication for antibiotic therapy in sore throat

### Indications for tonsillectomy
- Patients should meet all of the following criteria
  - sore throats are 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
- A six-month period of watchful waiting is recommended prior to tonsillectomy to establish firmly the pattern of symptoms and allow the patient to consider fully the implications of operation
- Once a decision is made for tonsillectomy, this should be performed as soon as possible, to maximise the period of benefit before natural resolution of symptoms might occur (without tonsillectomy)