Commissioning guide: Tonsillectomy

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1. Introduction

This commissioning guide comprises two pathways of care which culminate in tonsillectomy:

- Recurrent tonsillitis or its complications (e.g., quinsy) in children <16 years and in adults
- Sleep disordered breathing in children <16 years

Recurrent acute sore throat is a very common condition presenting in primary care and tonsillectomy is one of the most common operations. It presents a significant burden of disease; in the period quarter 1 to quarter 4 2019/20 approximately 10,500 tonsillectomies were carried out for recurrent tonsillitis in children (less than 17 years) and 7,300 in adults in England. In the same period approximately 9,500 procedures were carried out for sleep disordered breathing in children in England. There is an inequality of care demonstrated by widespread variation in the number of operations across the country; this makes an understanding of the pathway of care for this group of patients a commissioning priority.

For tonsillectomy for recurrent tonsillitis there is good evidence addressing effectiveness in children; but limited evidence in adults.

2. High Value Care Pathway for Tonsillectomy

This section provides two pathways:

2.1 Pathway for recurrent tonsillitis/ sore throat or its complications (e.g., quinsy) in children <16 and in adults

Primary care assessment

- Non-prescription of antibiotics does not mean that sore throats have been inadequately treated
- Carefully assess (history and examination) a patient with sore throat symptoms and document diagnosis of significant sore throat or tonsillitis including GP, nurse practitioner, urgent care / ‘walk-in’ and remote consultations
- Carefully assess and document impact of recurrent tonsillitis/sore throat on quality of life
- There is a role for the use of patient decision aids and shared decision making at this point in pathway
• **NICE guidance recommends antibiotics for selected cases of acute sore throat.**

• There is no evidence that antibiotics have a role in preventing recurrent tonsillitis

**Referral**

• Consider referral if **SIGN criteria** are met (i.e. 7 or more significant sore throats (with impact to patient and family) in the preceding 12 months or 5 or more episodes in each of the preceding two years, or 3 or more in each of the preceding three years).

• Document FeverPAIN or Centor scores to stratify the likelihood of bacterial tonsillitis.

• There are a small proportion of patients with specific clinical conditions or syndromes, who require tonsillectomy as part of their on-going management strategy, and who will not necessarily meet the SIGN guidance (e.g. those presenting with psoriasis, nephritis, PFAPA syndrome).

• Before referral to secondary care, discuss with patient/parents or carers the benefits and risks of tonsillectomy vs. active monitoring. Signpost patients to relevant information and give reassurance if no further treatment or referral for tonsillectomy is deemed necessary at this stage. This discussion should be documented and follow up should be encouraged.

• The impact of recurrent tonsillitis on a patient’s quality of life and ability to work or attend education should be taken into consideration. A fixed number of episodes, as described above, may not be appropriate for adults with severe or uncontrolled symptoms, or if complications (e.g. quinsy) have developed.

**Secondary care**

• Confirmation of primary care assessment, fulfilment of SIGN criteria for tonsillectomy and impact on quality of life and ability to work or attend education.

• Consultation with patient about management options using shared decision-making strategies and tools where appropriate.

• Management options: tonsil surgery, or referral back to primary care for active monitoring. At least one ‘face to face’ appointment if surgery is contemplated.

• There is emerging evidence of improved outcomes in postoperative bleeding rates and pain scores with tonsillotomy over tonsillectomy, particularly in children.

• Do not use codeine in children under 12 years as it is associated with a risk of respiratory side effects. Codeine is not recommended for adolescents (12 to 18 years) who have problems with breathing.
Surgical setting

**Children:**

- Any secondary centre is able to treat children 2 years (corresponding weight 12kg) and over with no high risk-factors or extremes of BMI. The staff and equipment as recommended in the Guidelines for the Provision of Paediatric Anaesthesia Services (GPAS) 2019 document should be available.

**Adults:**

- Usually as a day case

### 2.2. Pathway for children (<16 years) with obstructive sleep disordered breathing

**Primary care assessment**

- Obstructive sleep disordered breathing ranges from simple snoring to obstructive sleep apnoea. Carefully assess (history and examination) children presenting with symptoms of snoring to distinguish between simple snoring and disruptive breathing patterns whilst asleep.

- Make note of nasal obstruction and size of tonsils (consider photo documentation)

- Carefully assess and document impact on growth and development, behaviour and quality of life e.g., height and weight, hyperactivity, daytime somnolence, school performance.

- Consider asking parents to bring a recording (smartphone video) of their child sleeping.

- Consider the role of obesity as a cause of obstructive sleep disordered breathing and referral to a weight management service. Obese children achieve poorer PSG outcomes than those of a healthy weight.

- Children with simple snoring without symptoms or signs of apnoea are unlikely to benefit from adeno-tonsillectomy.

- In older children >3 years with mild/moderate symptoms of obstructive sleep disordered breathing consider a trial of nasal saline irrigation and/or intranasal steroids for 6-8 weeks.

- If available consider allergy testing/treatment.
Referral

- If there are ongoing concerns about obstructive sleep disordered breathing refer to secondary care

- Children with suspected severe apnoea need urgent specialist assessment.

Secondary care

- Reassessment of the patient's clinical history and examination and if available recording of child's sleep (smartphone video). Consider impact on growth and development, behaviour and quality of life.

- Consultation with parent/carers about management options using shared decision-making strategies and tools where appropriate.

- If there is clear obstructive sleep apnoea then discuss surgery.

- Children with simple snoring without symptoms or signs of apnoea are unlikely to benefit from adeno-tonsillectomy. Clinical assessment should guide decision making for adeno-tonsillectomy in the majority of children with sleep disordered breathing.

- Where there is diagnostic uncertainty consider overnight pulse oximetry, in hospital or at home or in selected cases (children under 2 years or with comorbidity) overnight polysomnography can be used to determine further management.

- Consider allergy testing and appropriate treatment if not undertaken in primary care.

- Children with mild or moderate signs and symptoms consider active monitoring prior to a decision on surgery. These children should be followed-up in secondary care.

- Do not use codeine in children under 12 years as it is associated with a risk of respiratory side effects. Codeine is not recommended for adolescents (12 to 18) who have problems with breathing.

Surgical setting

- Any secondary centre is able to treat children 2 years (corresponding weight 12kg) and over with no high risk-factors or extremes of BMI. The staff and
equipment as recommended in the Guidelines for the Provision of Paediatric Anaesthesia Services (GPAS) 2019.

- If the secondary centre is a high acuity centre with HDU provision, then children 1 year (corresponding weight 10kg) and over can be treated in the absence of high-risk factors.
- A Tertiary Centre can treat any child regardless of age, weight, co-morbidity or BMI extremes

3. Levers for implementation

3.1. Audit and peer review measures

The following measures and standards are those expected at primary and secondary care. Evidence should be able to be made available to commissioners if requested.

<table>
<thead>
<tr>
<th>Measure</th>
<th>Standard</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Primary Care</strong></td>
<td><strong>Standard</strong></td>
</tr>
<tr>
<td>Documentation of symptoms</td>
<td>Significant symptoms should be documented prior to referral</td>
</tr>
<tr>
<td>Referral</td>
<td>Do not refer patients who do not fulfil criteria for referral unless specific exceptions apply</td>
</tr>
<tr>
<td>Patient information</td>
<td>Patients are signposted to appropriate information on coexistent issues e.g., weight loss and allergy management</td>
</tr>
<tr>
<td><strong>Secondary Care</strong></td>
<td><strong>Standard</strong></td>
</tr>
<tr>
<td>Patient engagement and information</td>
<td>Evidence of patient’s engagement in shared decision-making process including signposting patients to appropriate patient information.</td>
</tr>
<tr>
<td>Criteria for surgery</td>
<td>Evidence of appropriate documentation that patients fulfil criteria for surgery.</td>
</tr>
<tr>
<td>Criteria for non-day case decisions</td>
<td>Evidence of appropriate documentation supporting any non-day case decision.</td>
</tr>
</tbody>
</table>

Audit

Audit of:
- Post-operative complications and morbidity
- Appropriate peri and post-operative management (pain control, post-discharge information etc)
### 3.2 Quality Specification/CQUIN

<table>
<thead>
<tr>
<th>Measure</th>
<th>Description</th>
<th>Data specification (if required)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Length of stay</strong></td>
<td>Provider demonstrates a mean LOS of &lt;2 days</td>
<td>Data available from HES</td>
</tr>
<tr>
<td><strong>Day Case Rates</strong></td>
<td>Provider demonstrates day case is the expectation</td>
<td>% achieving Best Practice Tariff</td>
</tr>
<tr>
<td><strong>Unplanned readmissions within 30 days</strong></td>
<td>Provider demonstrates low readmission rates within 30 days: up to 15% is acceptable (for post-operative pain, nausea, vomiting and bleeding)</td>
<td>Data available from HES Getting it Right First Time (GIRFT) Programme National Speciality Report</td>
</tr>
</tbody>
</table>

### 4. Directory

#### 4.1. Patient Information for tonsillectomy

<table>
<thead>
<tr>
<th>Name</th>
<th>Publisher</th>
<th>Link</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shared decision-making tool</td>
<td>NHS Interventions</td>
<td><a href="https://www.england.nhs.uk/evidence-based-interventions/resources/">https://www.england.nhs.uk/evidence-based-interventions/resources/</a></td>
</tr>
<tr>
<td>ENT-UK Patient Information leaflet on tonsillectomy</td>
<td>ENT-UK</td>
<td><a href="https://www.entuk.org/patient-information-leaflets">https://www.entuk.org/patient-information-leaflets</a></td>
</tr>
<tr>
<td>Tonsillitis</td>
<td>Patient.co.uk</td>
<td><a href="https://patient.info/doctor/tonsillitis-pro">https://patient.info/doctor/tonsillitis-pro</a></td>
</tr>
</tbody>
</table>
4.2 Clinician information for tonsillectomy

<table>
<thead>
<tr>
<th>Name</th>
<th>Publisher</th>
<th>Link</th>
</tr>
</thead>
<tbody>
<tr>
<td>Management of sore throat and indications for tonsillectomy</td>
<td>SIGN</td>
<td><a href="https://www.sign.ac.uk/media/1055/sign117.pdf">https://www.sign.ac.uk/media/1055/sign117.pdf</a></td>
</tr>
<tr>
<td>A national clinical guideline</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prescribing of antibiotics for self-limiting respiratory tract infections in adults and children in primary care</td>
<td>NICE</td>
<td><a href="http://www.nice.org.uk/CG69">http://www.nice.org.uk/CG69</a></td>
</tr>
<tr>
<td>Clinical Knowledge Summary: Acute Sore Throat Management</td>
<td>NICE</td>
<td><a href="http://cks.nice.org.uk/sore-throat-acute">http://cks.nice.org.uk/sore-throat-acute</a></td>
</tr>
<tr>
<td>Tonsillectomy and adenoidectomy in children with sleep related breathing disorders: consensus statement of a UK multidisciplinary working party</td>
<td>RCPCH</td>
<td><a href="https://publishing.rcseng.ac.uk/doi/full/10.1308/003588409X432239">https://publishing.rcseng.ac.uk/doi/full/10.1308/003588409X432239</a></td>
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5. Benefits and risks of implementing this guide

<table>
<thead>
<tr>
<th>Consideration</th>
<th>Benefit</th>
<th>Risk</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patient outcome</td>
<td>Ensure tonsillectomy is only undertaken on patients with appropriate and significant symptoms</td>
<td>As guidelines are well defined, some patients who might otherwise have benefitted from tonsillectomy will not have been offered the procedure (see section 1)</td>
</tr>
</tbody>
</table>
### Patient safety

| Patients receive appropriate information about their condition and treatment. | HES data indicate that as tonsillectomy rates have fallen in the UK there has been an annual increase in acute hospital admissions with tonsillitis and its complications. |

### Overnight oximetry

| Significantly cheaper than overnight Polysomnography as an in-patient |

### Patient experience

| Improved shared decision making with patients and family |

### Equity of Access

| Improve access to effective procedures for those most likely to benefit | To deny access to some patients who might otherwise have benefitted from tonsillectomy |

### Resource impact

| Reduce unnecessary referral and intervention | Reduce unnecessary societal costs of recurrent tonsillitis | Increased activity in primary and secondary care in managing acute sore throats. Costs of potential increased surgical activity |

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### 6. Further information

#### 6.1 Research recommendations

- Development of core outcome sets for common ENT conditions, including recurrent sore throat and obstructive sleep disordered breathing
- Research on prophylactic antibiotics in recurrent tonsillitis
- RCT of tonsillectomy in adults with recurrent tonsillitis (In progress)
- Development/validation of patient reported outcome measure for primary care
- Development of telemedicine / photo documentation to assist diagnosis and integration of care pathways across the patient journey
• Development of clinical and cost-effective peri and post-operative clinical protocols

• Research on clinically and cost-effective diagnostic and therapeutic pathway for children with obstructive sleep disordered breathing

• Research in effective self-management by patients with recurrent sore throats/tonsillitis

• Research into most effective methods for practitioners sharing evidence-based knowledge

• Research to clarify the role of montelukast therapy in mild to moderate OSA.

6.2 Evidence base


consensus statement of a UK multidisciplinary working party Ann R Coll Surg Engl 2009; 91: 000–000


21. Royal College of Anaesthetists: Guidelines for the Provision of Paediatric Anaesthesia Services 2019; Chapter 10


6.3 Guide development group for tonsillectomy

A commissioning guide development group was established to review and advise on the content of the commissioning guide. This group met once, with additional interaction taking place via email and teleconference.

<table>
<thead>
<tr>
<th>Name</th>
<th>Job Title/Role</th>
<th>Affiliation</th>
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<tbody>
<tr>
<td>Sean Carrie</td>
<td>Consultant ENT Surgeon (Chair)</td>
<td>ENT-UK</td>
</tr>
<tr>
<td>Su De</td>
<td>Consultant ENT Surgeon</td>
<td>ENT-UK/BAPO</td>
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<tr>
<td>Mark Lim</td>
<td>Associate Director of Planned Care and Cancer</td>
<td>Norfolk &amp; Waveney CCG</td>
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<tr>
<td>Folarin Majekodunmi</td>
<td>Patient Representative</td>
<td></td>
</tr>
<tr>
<td>Jill Morrison</td>
<td>Professor of General Practice,</td>
<td>Glasgow University</td>
</tr>
<tr>
<td>John Rocke</td>
<td>ST R ENT</td>
<td>ENT-UK/INTEGRATE</td>
</tr>
<tr>
<td>Philip Taylor</td>
<td>General Practitioner</td>
<td>Newcastle upon Tyne</td>
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<tr>
<td>Taran Tatla</td>
<td>Consultant ENT Surgeon</td>
<td>ENT-UK</td>
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6.4 Acknowledgement

The committee wishes to acknowledge the work undertaken by Ms Samantha Cox, Information Specialist, Cochrane ENT who assisted in the literature search for this update.

6.5 Funding statement

No specific funding was used in the formulation of this guidance.
SC is co-applicant on NIHR HTA: Clinical and cost effectiveness of tonsillectomy in adults. (project number 12/146/06)