

Surgery for Obstructive Sleep Apnoea: Tonsillectomy and Adenoidectomy

Scope

This policy covers the referral for surgery for patients with obstructive sleep apnoea (OSA). Other related Cambridgeshire and Peterborough CCG policies cover referral for surgery for [nasal obstruction or deformity](#), [otitis media](#) and [tonsillitis](#) in adults and children. This policy does not include surgery for trauma or suspected malignancy.

Policy

It is the responsibility of referring and treating clinicians to ensure compliance with this policy. Referral proforma should be attached to the patient notes to aid the clinical audit process and provide evidence of compliance with the policy. For patients not meeting the policy criteria, clinicians can apply for funding to the Exceptional Cases Panel by completing the exceptional funding section of the referral proforma: Click [here](#) to access the CCG clinical policies web page: select the Ear, Nose & Throat (ENT) Policies drop down option and select the **xx** Policy to access the referral proforma.

Adults and Children

The CCG will fund tonsillectomy/adenoidectomy in people with:

- obstructive sleep apnoea demonstrated by sleep study or diagnosed clinically; **AND**
- reports of witnessed apnoeic episodes (stopping breathing) or waking from sleep due to sensations of choking/obstruction; **AND**
- excessively large tonsils/adenoids; **AND**
- persistent daytime sleepiness.

Refer to the [OSA patient pathway](#) policy and [Surgical and Non Surgical Treatments for Snoring](#) policy criteria for other types of surgery.

Note: Patients who smoke should be advised to attempt to stop smoking and referred to stop-smoking services – see [stop smoking policy](#).

Evidence and Rationale

Adults

Randomised controlled trials have shown no significant benefit on daytime sleepiness and quality of life for laser-assisted uvulopalatoplasty or radiofrequency ablation compared to control but surgery was associated with persistent side-effects in about half of patients, commonly difficulty in swallowing, globus sensation and voice changes¹. Another randomised controlled trial showed similar improvements in Apnea–hypopnea index (AHI) and Epworth Sleepiness Scale for maxillomandibular advancement compared with auto-titrated CPAP². For most surgical interventions, only case series studies appear to have been conducted^{3–5} and SIGN guidance states that they should not be used outside the context of an RCT⁶.

A small RCT compared tonsillectomy and uvulopalatopharyngoplasty with control⁷. At 3-4 months, both groups showed reductions in AHI, Epworth sleepiness scale and partner reported snoring but there were greater reductions for treatment compared with control patients suggesting some benefit of surgery. SIGN recommend consideration of tonsillectomy for patients with large tonsils and OSAHS and that tracheostomy may be a possible intervention when all else fails in carefully selected individuals⁶.

Children

Studies of adenotonsillectomy in children have predominantly been case series, showing improvement in measures of obstructive sleep apnoea⁸⁻¹⁰. However, surgery normalised results on sleep studies in only 50-66% of children⁸⁻¹⁰.

An RCT of adenotonsillectomy versus watchful waiting in children with mild obstructive sleep apnoea showed no improvement in attention and executive function scores for adenotonsillectomy compared with control (both groups improved)¹¹. Both groups had improved AHI on polysomnography but the improvement was greater in the children who underwent adenotonsillectomy. There was normalisation of sleep studies in 79% and 46% of children respectively in treatment and control groups. Adenotonsillectomy may give some benefit in reducing apnoea's during sleep, but many children normalise with watchful waiting and surgery should only be used in persistent causes, where disturbance to sleep is having deleterious effects on development.

References

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Glossary

- Adeno-tonsillectomy:** Surgical removal of the adenoids and tonsils.
- Exudate:** A fluid rich in protein and cellular elements that oozes out of blood vessels due to inflammation and is deposited in nearby tissues.
- Sleep apnoea:** Cessation of breathing for ten seconds during sleep.

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