

## Day-case Tonsillectomy Guidance

### Executive Summary 2023

Historically, children undergoing tonsillectomy (and adenotonsillectomy) have been admitted overnight for observation post-operatively. This was primarily due to the risk of bleeding, pain management and monitoring return to oral intake. In the case of children with obstructed sleep disturbance, they were mainly admitted as a result of the perceived risks of respiratory complications and in particular a supplemental oxygen requirement following surgery. Despite concerns about the move to increasing numbers performed as day-case procedures in the 90s<sup>1</sup> the safety of day-case tonsillectomy has been demonstrated in multiple studies for the majority of children. In November 2019, the *Getting It Right First Time (GIRFT)*<sup>2</sup> report identified variations in day-case rates for tonsillectomy across the country with the national average rate being just above 40%. The highest quartile performing providers were achieving rates above 80%. Non-specialist Trusts had an average day-case rate of 62%, whereas specialist Trusts had an average rate of 50%. It appears that same-day discharge is not independently associated with an increased readmission rate at non-specialist Trusts and a modest increase in specialist Trusts. Multiple single centre series suggest that selected patients with obstructive sleep apnoea (OSA) can be done safely as day surgery without an increased risk of complications<sup>4,5</sup>.

A UK survey suggested that half the ENT surgeons routinely admitted children for having tonsillectomy for sleep disordered breathing<sup>6</sup>.

The move to increasing day case rates seems beneficial to both the child and family and also the wider healthcare system. It is desirable from the point of view of satisfaction of the child and carers where inpatient stays create increased childcare burdens for families. There are also significant costs associated with an overnight stay in hospital. This has a significant impact on resource allocation. More importantly, with pressures on inpatient beds, day-case surgery will facilitate more timely surgery and free resources to support the elective recovery of children's surgery following the pandemic.

This has led to a move towards a "default day-case" approach to tonsillectomy surgery. This approach means that all patients are treated as potential day of surgery discharge unless there are certain specific contra-indications or perioperative factors that might necessitate inpatient observation or treatment.

GIRFT have proposed a target day-case tonsillectomy rate of 80%. It has been suggested that a 70% rate might be appropriate in specialist centres, bearing in mind the increased

likelihood of co-morbidity in this patient group<sup>3</sup>. It has to be emphasised that these suggested rates may not be possible for all patient populations, but provides some indication of what might be achievable.

There are a range of tonsillectomy techniques in use, with dissection by cold steel, bipolar or Coblation as the most established techniques. Intracapsular tonsillectomy (most commonly by Coblation) is being used more commonly, especially in paediatric centres. Intracapsular techniques have been demonstrated in large cohort data to have lower in hospital complications and lower readmissions within 28 days compared with the data for dissection tonsillectomy. Local expertise and outcomes will vary and the most appropriate method for day case tonsillectomy is best determined by the individual units. Regular audit of outcomes for complications of tonsillectomy is encouraged<sup>7,8</sup>.

The British Association for Paediatric Otolaryngology (BAPO) were tasked with forming a working group to provide guidance about how to support centres achieving these day-case targets safely.

This guidance will apply to both tonsillectomy and adenotonsillectomy. This executive summary highlights the key parts of the guidance and will be followed by a more detailed document with supporting evidence and rationale for the practice suggested. It will also provide resources such as analgesia regimes.

## KEY POINTS

- Day-case tonsillectomy is safe and effective for the majority of non-comorbid children, even with obstructed sleep disordered breathing. It is desirable with regards the utilisation of resources, cost and the preference of most families. It will also facilitate more timely access to surgical treatment.
- An effective pre-assessment service for children helps to identify children who fulfil day case criteria in order to optimise day case rates and minimise unexpected admissions and day of surgery cancellations. Access to printed/online information should be provided for parents and children with regards to their care before, during and after surgery.
- Each department should have a clear day-case standard operating policy clarifying local implementation of all aspects of these recommendations from pre-operative preparation through to discharge.
- If a sleep study has been undertaken, sleep apnoea severity would not on its own determine suitability for day case surgery.
- Children with significant co-morbidities may not be suitable due the potential for early post-operative complications, especially respiratory distress (see appendix 1). Children at extremes of weight, especially above the 98<sup>th</sup> centile for weight/BMI, should be observed overnight.
- Children should live or can stay overnight within 45 mins of a unit with ENT out of hours cover with the ability to return to theatre if required. In regions with significant travel distances between hospitals and homes, specific care pathways, approved by the regional ODN and ICB, can be put in place to optimise the safe delivery of day-case procedures in an appropriate cohort of children. Assessing access to transport by the parent should form part of the preassessment prior to the day of surgery.

- Where safeguarding concerns are identified preoperatively or there are concerns raised as to parental ability to deliver appropriate post-operative care in the home environment, it may not be appropriate to proceed with a day case pathway for the child.
- Level 2 and 3 centres may consider day surgery for children 2 years and older (and greater than or equal to 12kg) if there are no other relative contraindications.
- The most frequent risks immediately post operatively are “primary” haemorrhage, poor oral intake, a persistent oxygen requirement and unanticipated respiratory distress.
- Children should be observed for a minimum of 3 hours with oxygen saturation monitoring. If there are concerns regarding bleeding, poorly controlled pain, unsatisfactory oral intake or oxygen requirement, this should be increased to 4 to 6 hours.
- If conditions for discharge are not met after extended observation, the child should be admitted to an in-patient bed. Where there are no paediatric in-patient beds at the local hospital, there should be an agreement in place for transfer to an appropriate nearby hospital and shared care provided by consultant paediatricians at this hospital.
- Children should be discharged home with sufficient weight-based analgesia to encourage maintenance of oral intake. Clear instructions should be provided to the parents at discharge.
- There should be clear instructions for parents regarding who to contact and where to present if a postoperative complication occurs after discharge. This should be provided in the printed/online instructions at discharge.

## REFERENCES

1. Yardley, M., 1995. Is it appropriate to perform adenoidectomy tonsillectomy or adenotonsillectomy on a day case basis? *Clin Otolaryngol* 20, 95–96. <https://doi.org/10.1111/j.1365-2273.1995.tb00021.x>
2. Marshall, A., 2019 'Ear, Nose and Throat Surgery GIRFT Programme National Specialty Report' [Online]. Available: <https://gettingitrightfirsttime.co.uk/wp-content/uploads/2019/10/ENT-Report-Nov19-L-FINAL.pdf>
3. Gray, W.K., Takhar, A.S., Navaratnam, A.V., Day, J., Swart, M., Snowden, C., Briggs, T.W.R., Marshall, A., 2022. Safety of day-case paediatric tonsillectomy in England: an analysis of administrative data for the Getting It Right First Time programme. *Anaesthesia* 77, 277–285. <https://doi.org/10.1111/anae.15562>
4. Youshani, A.S., Thomas, L., Sharma, R.K., 2011. Day case tonsillectomy for the treatment of obstructive sleep apnoea syndrome in children: Alder Hey experience. *International Journal of Pediatric Otorhinolaryngology* 75, 207–210. <https://doi.org/10.1016/j.ijporl.2010.10.036>
5. Bajaj, Y., Atkinson, H., Sagoo, R., Bhatti, I., Newbegin, C., 2012. Paediatric day-case tonsillectomy: a three-year prospective audit spiral in a district hospital. *J. Laryngol. Otol.* 126, 159–162. <https://doi.org/10.1017/S0022215111002957>
6. Gan, R.W.C., Kamani, T., Wilkinson, S., Thomas, D., Marshall, A.H., Sudarshan, P., Daniel, M., 2015. Day-case adenotonsillectomy for sleep apnoea in children? *International Journal of Pediatric Otorhinolaryngology* 79, 2155–2158. <https://doi.org/10.1016/j.ijporl.2015.09.038>
7. Keltie, K., Donne, A., Daniel, M., Stephenson, K., Wyatt, M., Kuo, M., Saunders, M., Kumar, N.B., Philpott, C.M., Bruce, I., Smith, M.E., Hardman, J.C., Cognigni, P., Richardson, H., Gross, S., Sims, A.J., Powell, S., 2021. Paediatric tonsillectomy in England: A cohort study of clinical practice and outcomes using Hospital Episode Statistics data (2008-2019). *Clinical Otolaryngology* 46, 552–561. <https://doi.org/10.1111/coa.13707>
8. Powell, S., Tweedie, D.J., Jonas, N.E., Bateman, N.D., Keltie, K., Sims, A.J., 2022. Coblation intracapsular tonsillectomy: A cohort study of NHS practice in England using Hospital Episode Statistics. *Clinical Otolaryngology* 47, 471–477. <https://doi.org/10.1111/coa.13929>

## **Appendix1**

### **Relative risk factors for day of surgery discharge**

<3 years old\*

<14 Kg

Extremes of weight /BMI >98 centile <2 centile

Down's Syndrome

Achondroplasia

Significant comorbidity including

- Severe Cerebral Palsy

- Significant Respiratory Disease

- Craniofacial abnormality

- Congenital heart disease

- Haematological /clotting abnormality

Neuromuscular disorder

Significant co-existing upper airway abnormality

Safeguarding concerns

\*Level 2 and 3 centres may wish to proceed  $\geq 2$  years old  $\geq 12$  Kg