

BRIEF ANSWERS
TO SPECIFIC
CLINICAL
QUESTIONS

# Tonsillectomy may improve quality of life, but hard data are lacking

# Q: When does an adult need a tonsillectomy?

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As a rough rule of thumb, adults who have three or more episodes of infectious tonsillitis per year with severe symptoms should be seriously considered for tonsillectomy, and those who have more than four or five episodes per year should definitely be considered. A pattern of such infections year after year makes an even stronger case for the surgery.

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The number of infections per year should not be the only guide, however: the decision should also focus on the severity of the symptoms. For example, patients who have only two or three infectious exacerbations per year but for whom each infection causes a full week of missed school or work should also be considered.

It is not necessary to document repeatedly positive streptococcal cultures, since the goal is not purely to eradicate streptococcal infection but rather to improve quality of life.

# ADULTS MAY BENEFIT, CHILDREN MAY NOT

Tonsillectomy in adults with chronic tonsillitis or pharyngitis has somewhat fallen out of favor in the past few decades. The primary reason is an extrapolation from data in children—pediatric studies suggested that the previous indications for pediatric tonsillectomy were too loose and evidence was lacking that children truly benefit from tonsillectomy for infectious indications.

In two randomized controlled trials, Paradise et al<sup>1</sup> concluded that the benefits of tonsillectomy in children do not appear to justify the risks and costs, and that the operation does not necessarily reduce the number of episodes of pharyngitis and tonsillitis in the 3 years after surgery.

The lack of benefit in children may not necessarily apply to adults, however. My colleagues and I analyzed 65 adult patients more than 1 year after tonsillectomy and found that their quality-of-life scores had improved substantially. We also found that they had decreased their use of antibiotics by almost 8 weeks per year and made five fewer visits to physicians per year.<sup>2</sup>

In a follow-up study,<sup>3</sup> we found that the decreased consumption of medical resources was sustained over time, and that the overall cost of adult tonsillectomy was recouped 2.3 years after the procedure, owing to savings in health care and economic resources.<sup>3</sup>

Mui et al<sup>4</sup> reviewed medical records from a health maintenance organization and found similar decreases in the use of medical resources after tonsillectomy.

Nevertheless, although the literature suggests a clinical benefit from tonsillectomy in adults, no randomized clinical trial has established its effectiveness in this population.

# ABSOLUTE VS RELATIVE INDICATIONS

When considering tonsillectomy in an adult, we should distinguish between whether he or she absolutely needs the operation or is merely a candidate for it.

Suspected malignancy and airway obstruction are strong or absolute indications for ton-sillectomy. Airway obstruction can occur if the tonsils are large enough to cause, for example, obstructive sleep apnea.

Only a small proportion of adult tonsillectomies are performed for these two indications, however. Most adult tonsillectomies are performed because of chronic infection.

But all forms of chronic infectious tonsillitis are not equal. Symptoms can be as simple as halitosis and cryptic debris emanating from the tonsils ("cryptic tonsillitis"). In more



severe cases, patients may have symptoms such as ear pain and persistent throat discomfort or pain.

The indications for tonsillectomy may be based on the presence and severity of one or more of these symptoms. Such patients would be considered "candidates" for tonsillectomy because the symptoms affect quality of life but are not life-threatening.

Interestingly, the size of the tonsils often has relatively little to do with the severity of symptoms, except in the case of airway obstruction, mentioned above.

Complicating matters, in episodes of chronic recurrent tonsillitis, patients may or may not be culture-positive for group A beta-hemolytic streptococcal infection. It is generally thought that tonsillectomy primarily

helps patients with recurrent bacterial tonsillitis (rather than viral tonsillitis or pharyngitis), although this has never been shown.

## REFERENCES

- Paradise JL, Bluestone CD, Colborn DK, Bernard BS, Rockette HE, Kurs-Lasky M. Tonsillectomy and adenotonsillectomy for recurrent throat infection in moderately affected children. Pediatrics 2002; 110:7–15.
- Bhattacharyya N, Kepnes LJ, Shapiro J. Efficacy and quality-of-life impact of adult tonsillectomy. Arch Otolaryngol Head Neck Surg 2001; 127:1347–1350.
- Bhattacharyya N, Kepnes LJ. Economic benefit of tonsillectomy in adults with chronic tonsillitis. Ann Otol Rhinol Laryngol 2002; 111:983–988.
- Mui S, Rasgon BM, Hilsinger RL Jr. Efficacy of tonsillectomy for recurrent throat infections in adults. Laryngoscope 1998; 108:1325–1328.

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