

## Risks associated with your anaesthetic

# SECTION 2: SORE THROAT

**After a general anaesthetic you may develop a sore throat. This can range between a minor discomfort and a more severe continuous pain. You may also have a very dry throat, a hoarse voice or feel pain on swallowing. These symptoms may disappear within 24 hours but may take two days or more to settle down.**

### Why does a sore throat happen?

During any general anaesthetic your anaesthetist must make sure that you can breathe freely. He or she must also make sure that if any stomach contents come up into the back of your throat during the anaesthetic, they do not get into your trachea (windpipe) or your lungs.

Your anaesthetist will choose one of several methods to achieve these things after you are anaesthetised. The choice will depend on your medical condition and on what operation you are having. He or she may use the following.

- ▶ **A face mask:** This is held firmly onto your face by your anaesthetist. Sometimes a separate plastic tube (a Guedel airway), which sits over your tongue, is needed as well.
- ▶ **A laryngeal mask airway:** This is a different shaped tube, which sits in the back of the throat above the opening to the trachea. It may have a soft inflatable cuff. When in place it allows gases to move freely in and out of the lungs. It does not prevent the entry into the lungs of stomach contents that may have collected in your throat. It is therefore not suitable for all operations.
- ▶ **A tracheal tube:** This is positioned in your trachea (windpipe) and has a soft cuff, which is inflated. This tube protects the lungs from

the entry of any stomach contents that have collected. It is also likely to be required if a breathing machine is being used to replace your natural breathing. There are a number of reasons why this type of tube would be used, including: long operations; operations on the abdomen or in the chest; operations on the brain; operations on the back of the body, where you must lie face down for the operation; operations on people who are significantly overweight

- ▶ **A gastric tube:** During your anaesthetic it is occasionally necessary to place an additional tube through your nose or mouth to empty your stomach.

All of these tubes or masks are placed after you are anaesthetised and you are not usually aware of their use. However, any of them may contribute to a sore throat after the operation, because of the following:

- ▶ During insertion, any of the tubes or the equipment used to accurately place them, may cause irritation or damage to your throat.
- ▶ The tracheal tube and the laryngeal mask airway may have a cuff, which is inflated for the duration of your anaesthetic. This may press on parts of your throat causing swelling and pain afterwards.

- ▶ Anaesthetic gases and some drugs can dry your throat. This may contribute to a sore throat following your anaesthetic.

Uncommonly, placement of an airway tube is difficult. It is possible that more significant damage to the vocal cords and other structures can occur occasionally in these circumstances.

### **How likely is a sore throat to occur?**

After a general anaesthetic with a tracheal tube the risk of developing a sore throat is estimated to be around 2 in 5.<sup>1-3</sup>

After a general anaesthetic with a laryngeal mask airway the risk is estimated at about 1 in 5.<sup>1</sup>

If any additional tubes are required in your nose or mouth, there is an increased chance of getting a sore throat.

Women are more likely to get a sore throat than men, and younger patients are more likely to have a sore throat than older people.<sup>1,3</sup>

### **What can be done about it?**

There is some evidence that a sore throat can be prevented or reduced by the use of local anaesthetic or steroid applied directly to the throat before the tube is placed. However, for long operations local anaesthetic is likely to have stopped working before the end of the operation.<sup>2,4</sup>

If a sore throat occurs, symptoms usually disappear without any specific treatment over the course of a few days. If the pain is severe, pain relief medicines such as paracetamol and gargling with soluble aspirin may help to reduce inflammation and pain.

### **What happens if the symptoms do not disappear?**

If your symptoms have not disappeared after two days or if you have a persisting hoarse voice you should contact your GP for further advice.

If, at any time, you are having any difficulty breathing or cough up blood, you should contact your GP urgently or your anaesthetist for further advice.

## Authors

**Dr Elizabeth Read, FRCA**  
Anaesthetic Specialist Registrar  
University Hospital Southampton  
NHS Foundation Trust

**Dr Lucy A White, MA, MRCP, FRCA**  
Consultant Anaesthetist  
University Hospital Southampton  
NHS Foundation Trust

## Editor

**Dr Tim Smith, MD FRCA**  
Consultant Anaesthetist  
Alexandra Hospital, Redditch  
Final FRCA Examiner

## References

1. Higgins PP, Chung F, Mezei G. Post operative sore throat after ambulatory surgery. *Br J Anaesth* 2002;**88**:582–584.
2. Tanaka Y et al. Lidocaine for preventing post-operative sore throat. Cochrane Database of Systematic reviews 2009, Issue 3.
3. Biro P, Seifert B, Pasch T. Complaints of a sore throat after tracheal intubation: a prospective evaluation. *Europ J Anesth* 2005;**22**(4):307–311.
4. Sumathi P et al. Controlled comparison between betamethasone gel and lidocaine jelly applied over tracheal tube to reduce post operative sore throat, cough and hoarseness of voice. *Br J Anaesth* 2008;**100**(2):215–218.



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website: [www.rcoa.ac.uk](http://www.rcoa.ac.uk)

email: [comms@rcoa.ac.uk](mailto:comms@rcoa.ac.uk)

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