Clinical Topic 1: Management of Sore Throat, Tonsillitis or Pharyngitis

Background

Antibiotics are unnecessary for most patients with sore throat as it will resolve by one week in 85% of people¹, whether it is due to streptococcal infection or not. There is no evidence that bacterial sore throats are more severe or long lasting than viral ones. Sore throat, tonsillitis or pharyngitis can usually be managed in the same way and all are usually due to viral infection. Group A beta-haemolytic streptococcus (GABHS) is the most common cause of bacterial infection but asymptomatic carriage of GABHS is also common, occurring in 6-40% of people. Those given antibiotics are more likely to re-attend if they have another similar infection. If the patient has difficulty breathing or stridor, epiglottitis should be considered and treated as a medical emergency.

When not to prescribe an antibiotic?

By far the majority of patients presenting with sore throat do not require antibiotic treatment. Even if a sore throat is bacterial (most commonly GABHS infection) antibiotics are not usually required except in the circumstances outlined below.

Centor criteria have been developed to aid diagnosis of Group A beta-haemolytic streptococcus (GABHS) as a cause of presentation with a sore throat. The Centor criteria are as follows:

- o Presence of tonsillar exudate
- o Tender anterior cervical lymphadenopathy or lymphadentitis
- o History of fever
- No cough

Absence of three or four of these criteria means that there is an 80% chance that the patient doesn't have the GABHS infection, and antibiotics are unlikely to be necessary or helpful.

Centor criteria may be useful to predict patients who are at a higher risk of GABHS and complications. Even so, the majority of patients who have GABHS will recover within one week without antibiotics, so Centor criteria should not be used as the sole decision making agent for whether or not to prescribe. Patients presenting with sore throat who are otherwise fit and well are very likely to make a full recovery within a week without antibiotics regardless of their Centor score.

When to consider prescribing an antibiotic?

- When the patient is systemically very unwell
- When the patient has symptoms and signs of serious complications e.g. peritonsillar abscess or peritonsillar cellulitis requires hospital admission
- Local policy for adults is
 - o Phenoxymethylpenicillin 1g twice a day or 500mg four times a day for 10 days OR
 - o Clarithromycin 500mg twice a day in penicillin allergy
 - AVOID amoxicillin due to risk of rash if glandular fever (regardless of allergy status)

Other management strategies

- Offer advice and reassurance, and recommend analgesics for symptom relief in all patients. Evidence shows paracetamol or NSAIDs significantly reduce throat pain.
- There is little evidence to support the use of other symptomatic treatments such as salt water, benzydamine or aspirin gargles
- Throat swabs have a limited place in routine use because they cannot distinguish between GABHS infection and asymptomatic carriage, and the delay in obtaining results limits use in practice.
- Consider differential diagnosis of glandular fever, thyroiditis or neutropenia (if on immunosuppressants).

¹ National Prescribing Centre MeReC Bulletin 2006;17(3):12-14.

Points of note

- Application of Centor criteria is not ideal, and will lead to some patients with bacterial pharyngitis not being treated and result in unnecessary antibiotic treatment for others.
- Rheumatic fever and post-streptococcal glomerulonephritis are now rare in developed countries.
- Fourteen people need to be exposed to antibiotics for one person's sore throat to resolve 16 hours earlier on day 7 of symptoms.²

Patient information

- The average duration of symptoms is 7 days whether you take antibiotics or not.
- Regular analgesia is more likely to help your symptoms than antibiotics.
- If antibiotics are given, take them regularly and complete the treatment. Analgesia will still be required in the first few days of treatment.
- Drink plenty of fluids and suck on throat lozenges or similar to stop your throat becoming dry.
- Rest if you feel tired
- Avoid foods that cause pain when you swallow.
- Try to avoid smoking or smoky atmospheres.

What should we do in practice?

- All patients presenting with sore throat should be given clear advice on symptomatic management and expected duration of illness.
- If antibiotics are being considered, application of Centor criteria may be helpful in conjunction with the overall assessment of the patient's condition.
- Peer review and audit of management of sore throat is encouraged.

² Sprinks A, Galsziou PP, Del Mar CB. Antibiotics for sore throat. *Cochrane Database of Systematic Reviews* 2006. Issue 4. Available at <u>http://onlinelibrary.wiley.com/o/cochrane/clsysrev/articles/CD000023/frame.html</u>