

Acute sore throat

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The pharynx is the garbage dump of the bronchial tubes and the nasal passages.

Sir William Osler

Acute sore throat accounts for about 4% of all FP visits; only a small proportion of people with sore throats seek medical attention.

- Sore throat is the second most common acute infection seen by FPs.
- Fewer than 1 in 10 people with sore throats go to see their FPs.
- Sore throat is predominantly a disease of youth and the early school years.
- Sore throats are more common in autumn and winter.

Cause

The most important bacterial cause of a throat infection is group A β -hemolytic streptococcus (GABHS), which is responsible for about one-third of sore throats in children aged 5 to 15 years. In adults and in younger children, only 10% of sore throats are caused by GABHS. Carriers of GABHS do not need treatment.

- Viruses are responsible for 85% to 95% of adult sore throats.
- Viruses cause 70% of sore throats in children aged 5 to 16.
- Viruses cause 95% of sore throats in children younger than 5 years.
- The most common bacterial cause of sore throat is GABHS.
- At least 30% of GABHS cultured in primary care are due to carriers who are not sick and are at very low risk of infecting other people.

Clinical course and diagnosis

In otherwise healthy people, a sore throat is usually self-limited and rarely produces serious aftereffects. Typical GABHS patients are children aged 5 to 15 who present with fairly acute onset of fever and sore throat.

- Headache, nausea and vomiting, malaise, dysphagia, and abdominal pain might be present.

- Cough and rhinorrhea are usually absent.
- Edema and erythema of the tonsils and pharynx are usually present.
- Anterior neck glands might be enlarged and tender.
- A non-adherent pharyngeal exudate might be present.

Sore throat decision rule

The sore throat decision rule can identify both patients who are so likely to have GABHS that a confirmatory test is not needed and patients who are so unlikely to have GABHS that further testing is unrewarding. Using the rule will successfully identify most patients who need treatment for GABHS infection, while decreasing antibiotic use for sore throat by about 80%.

The 4 most useful features to look for in diagnosing GABHS are enlarged submandibular glands, a throat exudate, fever, and absence of cough and runny nose. Use the following sore throat rule to decide which adults are most likely to have GABHS infection:

- 0 or 1 feature present—GABHS is unlikely;
- 2 features present—diagnosis uncertain, consider further testing; and
- 3 or 4 features present—GABHS is likely.

Rapid antigen detection tests

Office testing kits that determine whether a throat swab contains antistreptolysin antigen are now available and inexpensive. In patients with an indeterminate sore throat rule score, consider using such a test.

Antibiotic treatment

In antibiotic trials, 90% of both treated and untreated patients were symptom-free by the end of 1 week. Antibiotics shortened the duration of symptoms, but by a mean of only 16 hours overall. Most patients get better without antibiotics; however, antibiotics do modestly reduce symptoms.

Antibiotics *do* protect against the following:

- acute rheumatic fever (number needed to treat [NNT]=4000),

- subsequent acute otitis media (NNT=29),
- subsequent acute sinusitis (NNT=50), and
- subsequent peritonsillar abscess (NNT=27).

Antibiotics *do not* protect against the following:

- acute glomerulonephritis and
- subsequent meningitis.

If you are going to use an antibiotic for a presumed GABHS sore throat, the drug of choice is still penicillin; GABHS remains very sensitive to penicillin (less than 1% resistance).

- In developed countries, GABHS remains very sensitive to penicillin V.
- Clinical rules or laboratory tests determine which patients are most likely to have GABHS infection.
- Consider delaying treatment for 2 to 3 days to allow time to observe the clinical course and receive laboratory test results.
- Immediate treatment might increase reinfection rates.
- Treat contacts only during institutional epidemics.
- Giving penicillin twice a day can be as effective as giving it 3 times a day.
- A 5-day course relieves symptoms as well as a 10-day course, but is less effective in eradicating GABHS infection.

Nonantibiotic management of sore throats

- Consider nonantibiotic therapy as first-line placebo treatment.
- Nonsteroidal anti-inflammatory drugs relieve symptoms.

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Competing interests

None declared

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