Sore throat / tonsillitis / pharyngitis

Key facts

- One of the most frequent reasons for seeking healthcare and one of the commonest reasons for using antibiotics worldwide, although most are viral in origin.
- **85% resolve within 7 days** (regardless of whether viral or bacterial) and antibiotics reduce symptom duration by just 16 hours; tonsillitis is unusual in age<3y and ≥45 years
- Use the **Centor score** to identify patients who may benefit most from antibiotics
- Possible complications of tonsillitis: otitis media, peritonsillar abscess, obstructive sleep apnoea, scarlet fever, acute rheumatic fever, glomerulonephritis

General assessment for danger signs and as history indicates

Examination of throat/soft palate and neck
- Ensure a good view using a bright light +/- tongue depressor
- In children, make sure that parent/carer is holding the child in a good position if young, and also check ears

Suspicion of **peritonsillar abscess (quinsy)?** (bulging soft palate & uvula deviation; higher risk teenagers/young adults)

YES → Needs ENT review for drainage **Discuss with consultant**

NO

Age <3y
Clinical assessment, tonsillitis unusual at this age, usually viral cause; if rash, assess for scarlet fever (see below).
Discuss with consultant if in doubt

Age >3

CENTOR SCORE (Modified/McIsaac)
use in age ≥3y, with recent onset (3d) of sore throat

	Score
Fever	1
Tonsillar swelling or exudate	1
Absent cough	1
Tender/swollen anterior cervical lymph nodes	1
Age 3-14 years	1
Age 15-44 years	0
Age ≥45 years	-1

Total score	Risk of Strep Infection	Need for antibiotics? (see page 2 for treatment details)
0	1-2.5%	No antibiotics
1	5-10%	
2	11-17%	
3	28-35%	Immediate antibiotics if severe symptoms or, if less severe, consider a delayed prescription or arrange review in 48h
≥4	51-53%	

- Blood tests not required to help decide whether to prescribe antibiotics or not in cases of sore throat – use the Centor score. If in doubt speak to consultant.
- If **sore throat + rash,** consider **scarlet fever** (see below)

Discuss with consultant

- Suspicion of peritonsillar abscess
- Patient unable to swallow at all
- Persistent sore throat
- Tonsillitis and age >45 years
- Unilateral presentation
- Suspicion of malignancy
- If considering referral for tonsillectomy

Treatment

1. **Explain diagnosis and likely time-frame** (most better within 7d)
2. **Self-care advice** – regular analgesia, drinks - honey & lemon, teas, cold drinks/ice, throat lozenges
3. **Antibiotics? depending on Centor Score** (see antibiotic choice on page 2); if antibiotics not indicated, explain why & possible side-effects
4. **Safety netting –** advise to return if: danger signs (e.g. inability to drink, unable to swallow saliva, drowsiness, confusion, high fever not responding to simple measures, swelling, difficulty/fast breathing); very worried; ongoing symptoms despite treatment
5. **Corticosteroids? -** Can *consider* a single dose in patients with *severe* pain, especially if struggling with oral intake. *Do not give routinely* (adults: 10 mg dexamethasone or 60mg prednisolone)

How to do a 'delayed prescription of antibiotics'

Write a paper prescription (add expiry date 5-10 days time), explain that antibiotics are not required at present and that we expect the infection to get better on its own, but incase symptoms continue/worsen, they can fill the prescription at a pharmacy after a predetermined period (e.g. 2-3d)

CHOICE OF ANTIBIOTICS IN TONSILLITIS			
	DRUG	DOSE	DURATION
First line:	Benzathine Penicillin OR Penicillin V (250mg tablets)* If young children unable to take penicillin tablets (first choice): amoxicillin syrup	<27kg: 0.6 million units IM as a single dose >27kg: 1.2 million units IM as a single dose Child 1-11m: 62.5mg QDS or 125mg BD Child 1-5y: 125mg QDS or 250mg BD Child 6-11y: 250mg QDS or 500mg BD Adult/child>12y: 500mg QDS or 1g BD Child 1-11m: 125mg TDS Child 1-4y: 250mg TDS Age >5y and adults: 500mg TDS	1 dose 10 days (to increase likelihood of Strep eradication) 10 days
In penicillin allergy and 2nd line:	Clarithromycin (500mg tablets) Erythromycin – if pregnant (preferred to clarithromycin) or syrup for children unable to take tablets	<8 kg: 7.5 mg/kg BD 8 to 11 kg: 62.5 mg BD 12 to 19 kg: 125 mg BD 20 to 29 kg: 187.5 mg BD 30 to 40 kg: 250 mg BD Child ≥ 12yrs and adults: 250mg BD Child 1 – 23 months: 250mg BD Child 2-7yrs: 500mg BD Adult and child > 8yrs: 500 – 1000mg BD	10 days 10 days

* Penicillin V is better than alternatives for treating Group A Strep as it is very effective but also narrow spectrum, which is better for avoiding AMR

Scarlet Fever

- Disease resulting from exotoxin produced by Group A beta-haemolytic strep; can lead to invasive disease
- Commonest in children aged 2-8y
- Presents with sore throat, fever and a rash; headache, fatigue, vomiting, abdo pain are common.
- The rash: appears on second day, neck and chest first then spreads, coarse texture like sandpaper, (later desquamation)
- On examination: strawberry tongue, cervical lymphadenopathy, flushed face (perioral pallor), pharyngitis with haemorrhagic spots on palate
- Check for features of systemic disease
- Treat with antibiotics as above, for a full 10 days of treatment
- Observe if immunocomprosmied as increased risk of invasive infection

Referral for tonsillectomy

Two indications for tonsillectomy: recurrent infection and sleep disordered breathing (sleep apnoea)

In recurrent tonsillitis, consider tonsillectomy if:

- 3 infections per year for 3 consecutive years, or
- 5 infections per year for 2 consecutive years, or
- 7 infections in a one year period

No need to send to ENT during the acute infection, treat as above and arrange OPD appointment.

References

WHO Essential Medicines https://list.essentialmeds.org/recommendations/527
UpToDate accessed 6/1/23; BJGP 2017;67:e634 ; BMJ 2017;358:j4090
Worldwide comparison of treatment guidelines for sore throat https://doi.org/10.1111/ijcp.13879