North Thames Paediatric Network
Connecting paediatric services

Group A Streptococcus Infections Guidance for Paediatricians

Group A streptococcus (GAS) information

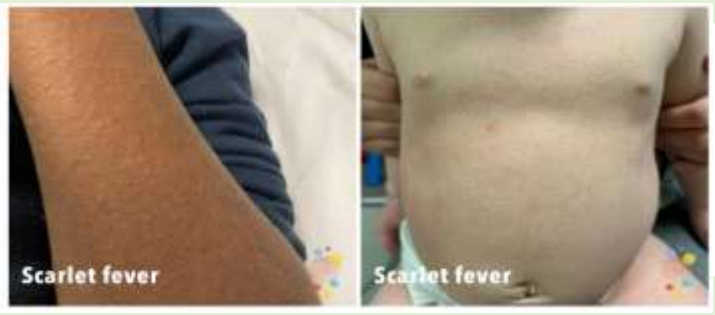
- *GAS are a bacteria that normally live in our throats and on our skin*
- *Occasionally, they can cause infections that are mild – scarlet fever, tonsillitis, cellulitis*
- *Rarely, infections are invasive (iGAS) and can be severe e.g. sepsis, pneumonia+/- empyema, bone and joint infections, necrotising fasciitis*
- *The clinical presentation of these infections is the same as it has always been, but currently we are seeing more children with empyema and pneumonia*

Scarlet fever

Clinical features: fever, sandpaper rash, strawberry tongue, +/- sore/red/pus on throat, lymphadenopathy, general fatigue, headache, nausea

Tests: Throat swab for MC&S if you are going to treat

Treatment: Treat with antibiotics (see box below)



Tonsillitis

Clinical features: fever, sore throat, red/pus on tonsils.
In > 3-year-olds use clinical judgement and FEVERPAIN/Centor score. In < 3-year-olds assess clinically for tonsillitis in history (refusing food/drink) and examination (red/pus on tonsils).

Test: Throat swab for MC&S if you are admitting the child

Treat: Deciding when to treat is difficult as the clinical presentation is not specific to GAS. Most children will have viral tonsillitis. We advise antibiotics for the current period if:

- Isolated tonsillitis (red/pus on throat) without other upper respiratory tract signs
- Evidence of tonsillitis and an epidemiological link to a known iGAS case
- The child has been unwell recently, seemed to get better, then deteriorated again with tonsillitis

Invasive GAS (iGAS)

- *Group A strep can invade and cause severe illness that evolves rapidly.*
- *Be aware of the biphasic nature of the infections – if have they have improved after the initial onset of illness and then deteriorated, consider secondary bacterial infections (not only GAS). In recurrent fever, undertake investigations (FBC, CRP as a minimum).*
- *Listen to parents when they say their child is not right, even if they cannot describe the exact issue.*

Clinical syndromes:

Sepsis: assess and manage as per APLS/local guidance, escalate accordingly and call Paediatric ID early, add clindamycin/IVIG if signs of Toxic Shock Syndrome

Pneumonia: there is an increase in pneumonia with empyema, so ensure a thorough examination is performed and if reduced air entry, needs CXR.

Bone/joint infections: normal assessment and management as per local guidelines

Necrotising fasciitis: normal assessment and management as per local guidelines

Tests: Send throat swabs in children/young people you suspect have iGAS

Antibiotics:

UKHSA guidance:

<8yrs old Amoxicillin >8yrs Penicillin V Duration: 7 days
Azithromycin if true penicillin allergy Duration: 5 days