Consultative Council on Obstetric and Paediatric Mortality and Morbidity

Contact prophylaxis for invasive Group A streptococcus infections

Good practice point

OFFICIAL

Key points

- **There have been many infections due to Group A streptococcus in the hospital and community over the past few years, in Victoria and across Australia.**
- **For those deemed to have 'invasive' Group A strep infection, antibiotic prophylaxis should be considered in their contacts. Those at highest risk are birthing mother-baby pairs, but household and household-like contacts are also considered at risk.**

Aim

To alert clinicians to contact risk and prophylaxis for infections due to Group A streptococcus**.**

Background

Group A streptococcus (GAS) also known as *Strep A*, *beta-haemolytic strep* or *Streptococcus pyogenes*, causes a spectrum of infections including tonsillitis, impetigo and scarlet fever.

There has been an increased incidence of hospitalisations due to invasive GAS (iGAS) infections, generating a number of Victorian Chief Health Officer alerts. *'Invasive'* disease is defined by the isolation of the bacteria from a sterile site, including blood stream, lungs, cerebrospinal fluid and/or deep muscle layers. iGAS is now a nationally notifiable condition, and in Victoria an urgent notification for medical practitioners and pathology services in Victoria ("Changes to invasive group A streptococcal disease notification", 2024).

Contacts

Individuals at greatest risk of secondary infection following exposure to a case with iGAS include mother-neonate pairs and household or household-like contacts (Communicable Diseases Network Australia, 2024). This risk period is within 30 days of exposure of the index case diagnosed with iGAS. Identification of secondary cases outside of this period is rare.

There should be a lower threshold for those contacts who may be deemed at higher risk due to underlying medical conditions, older or younger age, and/or recent illness.

Definitions of contacts

- Birthing mother-baby pairs
- Household or household-like contacts
  - Those who have spent more than 24 hours in the same house as the index case in the week prior to onset of symptoms
  - Those who have had sex or had other intimate contact with a case during the case's infectious period (Communicable Diseases Network Australia, 2024)*:*

Contact prophylaxis with antibiotics

Those at greatest risk of iGAS are those who are at the extremes of age, pregnant women, First Nations people and those with chronic medical comorbidities (Communicable Diseases Network Australia, 2024). Recommendations may involve a risk-benefit assessment for each individual.

It is important that regardless of whether antibiotics are prescribed, relevant contacts should be warned of signs and symptoms which warrant medical attention. Throat swabs are not recommended to determine whether antibiotics are required.

Guidelines for contact prophylaxis vary between jurisdictions (locally in Australia and internationally).

Assuming 100% effectiveness of antibiotic prophylaxis, the number needed to treat (NNT) to prevent a single secondary case of iGAS is comparable to that for invasive meningococcal disease, 271-1022 vs 200 (Hung et al., 2024).

Antibiotic choice for prophylaxis

When giving antibiotics, it should ideally be given within 48 hours of exposure to the index case (but no later than 10 days). Suitable antibiotics in the community include oral cephalexin for ten days, alternatively azithromycin or clindamycin in case of allergy, as outlined in the RCH Clinical Practice Guidelines (RCH Clinical Practice Guidelines, 2024).

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