Unusual presentation of more common disease/injury

Late onset group B streptococcal disease manifests as submandibular cellulitis

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Summary

A 3033g male infant was born to a healthy mother at 39 weeks gestation by normal vaginal delivery with Grade 1 meconium stained liquor. There was no prolonged rupture of membranes or any antenatal risk factors for sepsis. The immediate neonatal period was uneventful and the baby was discharged after two days. At 6 weeks of age the baby was admitted with an 8-hour history of inconsolable crying. He was pyrexial. Initially the possibility of intussusception was considered, however, the submandibular swelling became more obvious and tender. His airway was clear. Chest x-ray and abdominal x-ray were normal. Ultrasound of the submandibular region showed soft tissue swelling with no fluid collection. CRP was initially 0.7 but increased to 87 the next day. Blood cultures grew group B streptococcus. (GBS) He was treated for five days with appropriate intravenous antibiotics. He was discharged home and recovered fully.

BACKGROUND

Cellulitis-adenitis is a rare presentation of GBS infection in neonates.¹⁻³ The clinical features include a mean age of 5 weeks, male predominance (75%), and rapid resolution with appropriate antimicrobial therapy.²⁻³ It is usually GBS type III and the pathogenesis is postulated to be lymphatic spread from ipsilateral otitis media or mucus membrane colonization with subsequent bacteraemia and seeding of the soft tissues.³

CASE PRESENTATION

At 6 weeks of age the baby was admitted with an 8-h history of inconsolable crying. He was pyrexial. Initially the possibility of intussusception was considered; however, the submandibular swelling became more obvious and tender (figure 1–2). There was no airway compromise.

Figure 1 Child showing submandibular cellulitis

Figure 2 Child showing submandibular cellulitis

INVESTIGATIONS

Chest x-ray and abdominal x-ray were normal. Ultrasound of the submandibular region showed soft tissue swelling with no fluid collection. C reactive protein was initially 0.7 but increased to 87 the next day. Blood cultures grew group B streptococcus (GBS).

TREATMENT

He was treated for 5 days with appropriate intravenous antibiotics.

OUTCOME AND FOLLOW-UP

He was discharged home and recovered fully.

DISCUSSION

Cellulitis-adenitis is a rare presentation of GBS infection in neonates. The clinical features include a mean age of 5 weeks, male predominance (75%) and rapid resolution with appropriate antimicrobial treatment. It is usually GBS type III and the pathogenesis is postulated to be lymphatic spread from ipsilateral otitis media or mucus membrane colonisation with subsequent bacteraemia and seeding of the soft tissues.

It is important that clinicians are aware of this condition when assessing an infant with non-specific symptoms and

pyrexia. It may be the only initial sign in the presentation of GBS sepsis and may also be associated with pneumonia and meningitis.

Learning points

- It is important that clinicians are aware of GBS causing submandibular cellulitis when assessing an infant with non-specific symptoms and pyrexia.
- Submandibular Cellulitis may be the only initial sign in the presentation of GBS sepsis and may also be associated with pneumonia and meningitis.

Competing interests None.

Patient consent Obtained.

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