Late onset group B streptococcal disease manifested by isolated cervical lymphadenitis

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Sepsis and meningitis are the major clinical manifestations of group B streptococcal (GBS) infections in neonates, but GBS can cause a wide spectrum of presentations ranging from asymptomatic bacteraemia to fulminate septicemia and shock. To our knowledge this is the first report of isolated neonatal lymphadenitis as a manifestation of late onset GBS disease.

Group B streptococcus (GBS) is one of the leading pathogens of neonatal infection of both early and late onset. Early onset sepsis is typically related to vaginal carriage of the mother and vertical transmission during birth. The origin of late onset disease is less clear. It is believed to be transmitted both vertically and horizontally from maternal and nosocomial sources, or to be the result of persistent colonisation. Whereas sepsis and meningitis are the most common clinical manifestations, GBS can cause a wide spectrum of focal infections such as osteomyelitis, ethmoiditis, empyema, conjunctivitis, and cellulitis-adenitis, or non-local disease ranging from asymptomatic bacteraemia to fulminating septic shock. To our knowledge this is the first report of isolated lymphadenitis as a manifestation of late onset GBS disease in a young infant.

CASE REPORT

A 3760 g male infant was born to a healthy 26 year old mother at 41 weeks gestational age. Due to alterations of the cardiotocograph, cesarean section had to be performed; the immediate neonatal period, however, was uneventful. The infant was discharged from the hospital at the age of 8 days. The boy was breast fed and developed well until the age of 24 hours when he became irritable. The consulting paediatrician noticed a submandibular mass on the right side as well as increasing irritability. The infant was immediately referred to the hospital for further diagnosis and treatment. On admission, physical examination showed an irritable infant with a rectal temperature of 38.4 °C. He presented with an irritable neonate. The boy was discharged from the hospital at the age of 8 days. The boy was breast fed and developed well until the age of 24 hours when he became irritable. The consulting paediatrician noticed a submandibular mass on the right side as well as increasing irritability. The infant was immediately referred to the hospital for further diagnosis and treatment. On admission, physical examination showed an irritable infant with a rectal temperature of 38.4 °C. He presented with an irritable neonate. The boy was discharged from the hospital at the age of 8 days. The boy was breast fed and developed well until the age of 24 hours when he became irritable. The consulting paediatrician noticed a submandibular mass on the right side as well as increasing irritability. The infant was immediately referred to the hospital for further diagnosis and treatment. On admission, physical examination showed an irritable infant with a rectal temperature of 38.4 °C. He presented with an irritable neonate. The boy was discharged from the hospital at the age of 8 days. The boy was breast fed and developed well until the age of 24 hours when he became irritable. The consulting paediatrician noticed a submandibular mass on the right side as well as increasing irritability. The infant was immediately referred to the hospital for further diagnosis and treatment. On admission, physical examination showed an irritable infant with a rectal temperature of 38.4 °C. He presented with an irritable neonate. The boy was discharged from the hospital at the age of 8 days. The boy was breast fed and developed well until the age of 24 hours when he became irritable. The consulting paediatrician noticed a submandibular mass on the right side as well as increasing irritability. The infant was immediately referred to the hospital for further diagnosis and treatment. On admission, physical examination showed an irritable infant with a rectal temperature of 38.4 °C. He presented with an irritable neonate. The boy was discharged from the hospital at the age of 8 days. The boy was breast fed and developed well until the age of 24 hours when he became irritable. The consulting paediatrician noticed a submandibular mass on the right side as well as increasing irritability. The infant was immediately referred to the hospital for further diagnosis and treatment. On admission, physical examination showed an irritable infant with a rectal temperature of 38.4 °C. He presented with an irritable neonate. The boy was discharged from the hospital at the age of 8 days. The boy was breast fed and developed well until the age of 24 hours when he became irritable. The consulting paediatrician noticed a submandibular mass on the right side as well as increasing irritability. The infant was immediately referred to the hospital for further diagnosis and treatment. On admission, physical examination showed an irritable infant with a rectal temperature of 38.4 °C. He presented with An inability to access the full text of the document.
remained sterile. Therefore, the route of transmission via infected breast milk does not seem probable.

This case of isolated GBS lymphadenitis shares similarities with the cellulitis-adenitis syndrome, which has been noted as a late onset manifestation of GBS infection in preterm and term, predominantly male infants, aged 0 to 10 weeks (median 4.5 weeks), who have non-specific signs of systemic infection including fever and irritability. The case reported here is unusual because of the isolated localised lymphadenitis and the lack of obvious cellulitis. From the clinical point of view, GBS should be considered as a possible aetiologic agent in young infants presenting with non-specific signs of systemic infection and localised lymphadenitis. Isolated lymphadenitis as well as cellulitis may be a readily evident indicator of underlying bacteraemia, and therefore can serve as a valuable clinical clue. Physicians need to be aware of unusual forms of neonatal GBS infection and possible meningeal involvement as a manifestation of late onset GBS invasive infection, resulting in a different diagnostic course and treatment.

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