key points

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***Neisseria meningitidis* is an encapsulated Gram-negative** diplococcus which colonises the upper respiratory tract without causing symptoms in up to 25% of the population. At least 13 different serogroups cause invasive meningococcal disease (IMD). In the UK serogroup B causes more than 80% of cases of invasive disease.

Although the annual incidence of IMD in the UK has halved in the past 20 years, it is still 25/100,000 children. There are more cases in the winter and early spring. More than 75% of cases occur in the under 5s, reflecting the lack of ability of the immature immune system to mount an effective response to the polysaccharide capsule of the organism. There is also a peak around adolescence, attributed to high rates of nasopharyngeal carriage. A high index of suspicion and a low threshold for referral is essential.

Meningococcal disease can present with features of septicaemia, fever, purpura, and rapidly progressive shock, or with meningitis which can occur without a rash. Many cases have a mixed picture. Young infants with meningitis may not display the classical signs, but appear unwell, lethargic and floppy.

A rash which has been present and unchanged for days is unlikely to be caused by IMD, whereas a rapidly evolving rash is more concerning. Petechiae which start to spread, become purpuric, occur in association with signs of shock or meningitis, or in any child who appears ill should always be treated as IMD until proven otherwise.

Any child with symptoms and signs suggestive of IMD and a non-blanching rash should be transferred to hospital as an emergency immediately. IM (or IV) benzylpenicillin (or ceftriaxone) should be given at the earliest opportunity, but treatment should not delay transfer. If the child does not have features suggestive of IMD at the time of initial assessment it is important to give parents advice regarding symptoms and signs which may suggest deterioration.

Ciprofloxacin to eliminate nasopharyngeal carriage is given to close contacts who may transmit infection to other susceptible individuals. Group C conjugate vaccine was developed and introduced into the infant schedule in 1999-2000. A vaccine active against MenB is likely to be added to the childhood schedule at 2, 4 and 12 months, once a cost-effective price is negotiated.