

OSCE

Candidate information

You are the consultant in a tertiary ED which sees a large number of paediatric patients. Yesterday, a 2 year old child re-presented after being discharged home with “viral urti”. The child is now intubated and being treated for meningitis. The missed diagnosis has been appropriately flagged and is to be followed up by the head of ED.

An RMO who was peripherally involved in the case has some questions about meningitis in children and has approached you while the department is not busy to answer these questions for them.

Domain	%
Medical expertise	60
Prioritisation and decision making	
Communication	20
Teamwork and collaboration	
Leadership and management	
Health advocacy	
Scholarship and teaching	20
Professionalism	

Meningitis

Actor (RMO) information

You were peripherally involved in the care of a child who yesterday re-presented with meningitis after being sent home with a “viral urti”. The child has now been intubated and admitted to PICU with meningitis.

You have questions regarding meningitis in children, and have asked your consultant to answer these questions. The department is not busy, and now is an appropriate time for these questions.

Questions:

- What are the symptoms of meningitis?
- What organisms cause meningitis? Does this differ with age group?
- Does it make a difference if the child is vaccinated?
- What is the treatment of meningitis?
- Is this a notifiable illness?
- Tell me about chemoprophylaxis. Will I need it, or the Registrar who intubated the child?
- What drugs are used for chemoprophylaxis?

Marking:

- Examination findings: floppy, decreased GCS, tachycardic/hypotensive, febrile, tachypnoea. Rash and neck stiffness late signs. Non-blanching purpuric rash. Full fontanelle in babies.
- Organisms: neonates (Listeria, E coli, Group B Strep). Children – Neisseria, Strep pneumonia, H. influenza. Elderly – Listeria, E. coli, Neisseria
- Vaccination doesn't protect against the other causes of meningitis, but will protect against the strain vaccinated against.
- Neisseria meningitidis has 13 strains or serogroups. Serogroups B (60%) and C (30%, but 70% of deaths!!!) cause most disease in Australia. There is no vaccine available against “B”. A vaccine (quadrivalent polysaccharide) against A, C, Y and W125 is available.
- Treatment of meningitis: dexamethasone, then ceftriaxone/cefotaxime. Ben pen if Listeria. Vanc+ciproflox if immunosuppressed.
- Notifiable disease by CDC
- Chemoprophylaxis: it is important that prophylaxis be given within 24 hours to contacts. All intimate, household or daycare contacts who have been exposed to index case within 10 days of onset.
- The registrar and RMO do NOT need prophylaxis unless they gave mouth-to-mouth to the child
- Chemoprophylaxis: ciprofloxacin 500mg single dose. Ceftriaxone 250mg IM if pregnant. 125mg IM if child.

	Mark
Identifies different organisms by age group	2
States symptoms of meningitis generally – preferably with time aspect	2
Treatment of meningitis – antibiotics, dexamethasone	2
Clear understanding of indications for chemoprophylaxis	1
States notifiable disease	1
Mentions immunisation	1
Specifies drugs used for chemoprophylaxis	1