






# Fever in Children

The febrile child is a very common presentation in general practice, but can be highly challenging for many reasons – parental distress, uncertainty, potential for serious illness and rapid deterioration, and a need to minimise investigation. Registrars have generally seen a lot of acute presentations of febrile children in ED, but assessment and management is different in the GP setting. It is vital that supervisors are confident that registrars are competent in managing the febrile child.

<p><b>TEACHING AND LEARNING AREAS</b></p> 	<ul style="list-style-type: none"> <li>• Common and serious causes of fever in children</li> <li>• Presentation of fever in neonates and young infants, compared to older infants and toddlers, and older children</li> <li>• Red flags for serious illness</li> <li>• Managing uncertainty in undifferentiated presentations of fever</li> <li>• Assessment of children with fever – age, toxicity, likely focus etc.</li> <li>• Management of children with fever</li> </ul>				
<p><b>PRE-SESSION ACTIVITIES</b></p> 	<ul style="list-style-type: none"> <li>• Read <a href="#">A is for Aphorisms. What is a fever?</a> - an AFP article which defines fever</li> <li>• Read the AAFP article <a href="#">Evaluation of Fever in Infants and Young Children</a></li> <li>• Registrar to review the files of a three recent encounters with febrile children</li> </ul>				
<p><b>TEACHING TIPS AND TRAPS</b></p> 	<ul style="list-style-type: none"> <li>• Children can have severe sepsis with minimal or no fever - the level of fever is not a good indication of severity of illness</li> <li>• The response to antipyretics should not be used as a diagnostic tool</li> <li>• Never discount the parent's concern</li> <li>• The <a href="#">ABCD signs of toxicity</a></li> <li>• Fever without a clear focus in an under 3 month old usually needs admission</li> <li>• Perform a urinalysis in children without an obvious focus</li> </ul>				
<p><b>RESOURCES</b></p> 	<table border="1"> <tbody> <tr> <td data-bbox="336 1646 432 1823"><b>Read</b></td> <td data-bbox="432 1646 1489 1823"> <ul style="list-style-type: none"> <li>• <a href="#">NSW Health Children and Infants with Fever: Acute Management Guidelines</a></li> <li>• <a href="#">RCH Clinical Guidelines on the Febrile Child</a></li> <li>• <a href="#">Traffic Lights Screening tool for Fever in children RCH</a></li> <li>• <a href="#">foam4gp Paediatric fever phobia</a></li> </ul> </td> </tr> <tr> <td data-bbox="336 1823 432 1883"><b>Watch</b></td> <td data-bbox="432 1823 1489 1883"> <ul style="list-style-type: none"> <li>• <a href="#">Pecha Kucha on Paediatric Emergencies/febrile kids</a></li> </ul> </td> </tr> </tbody> </table>	<b>Read</b>	<ul style="list-style-type: none"> <li>• <a href="#">NSW Health Children and Infants with Fever: Acute Management Guidelines</a></li> <li>• <a href="#">RCH Clinical Guidelines on the Febrile Child</a></li> <li>• <a href="#">Traffic Lights Screening tool for Fever in children RCH</a></li> <li>• <a href="#">foam4gp Paediatric fever phobia</a></li> </ul>	<b>Watch</b>	<ul style="list-style-type: none"> <li>• <a href="#">Pecha Kucha on Paediatric Emergencies/febrile kids</a></li> </ul>
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<p><b>FOLLOW UP/ EXTENSION ACTIVITIES</b></p> 	<ul style="list-style-type: none"> <li>• Document the next five cases of children presenting with fever and discuss with supervisor in a future session</li> <li>• Undertake multiple choice questions and discuss</li> <li>• Role play a highly anxious parent concerned about meningitis presenting with an 18 month old child with an URTI</li> </ul>				

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## Clinical Reasoning Challenge

- QUESTION 1. You have just seen Connie, a 20 month old child, who presented with a fever and viral exanthem. You are confident that this is a simple viral infection but appropriately safety net with her mother about possible serious illness, including meningococcal disease. In discussing meningococcal disease, which of the following is FALSE?
- Rarely presents with non-specific symptoms
  - May have pre-existing coryzal illness
  - May present with gastrointestinal symptoms but no rash
  - May present with a blanching, non-purpuric, rash
  - May present with leg pain, cold extremities and abnormal skin colour
- QUESTION 2. Georgia, aged 3, presents with fever and a rash. You are concerned about Kawasaki Disease. In relation to typical features of Kawasaki disease, which of the following is TRUE?
- High fever lasting no more than 3 days
  - Exudative conjunctival injection
  - Blistering of fingertips
  - Cervical lymphadenopathy
  - Diarrhoea
- QUESTION 3. Adele, an 8 year old girl, presents with a high fever. Physical examination reveals a membranous tonsillar exudate, generalised lymphadenopathy, hepatosplenomegaly and a faint macular rash. Which of the following would MOST LIKELY be found?
- Raised ASOT (antistreptolysin titre)
  - Atypical lymphocytes in peripheral blood film
  - Bone marrow shows lymphatic leukaemia
  - Cytomegalic inclusion bodies in cells from the urinary sediment
  - Positive Schick test
- QUESTION 4. Atticus, aged 18 months, presents with a fever of 38.3C but no focus of infection and no demonstrable abnormal physical signs. Which one of the following tests should be initially performed?
- E.S.R.
  - Full blood examination
  - Microscopy of urine
  - Throat swab
  - X-ray of chest

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## ANSWERS

### QUESTION 1

You have just seen Connie, a 20 month old child, who presented with a fever and viral exanthem. You are confident that this is a simple viral infection but appropriately safety net with her mother about possible serious illness, including meningococcal disease. In discussing meningococcal disease, which of the following is FALSE?

- Rarely presents with non-specific symptoms

### QUESTION 2

Georgia, aged 3, presents with fever and a rash. You are concerned about Kawasaki Disease. In relation to typical features of Kawasaki disease, which of the following is TRUE?

- Cervical lymphadenopathy

Further reading for registrars who find this question challenging: <http://www.racgp.org.au/afp/2013/july/kawasaki-disease/>

### QUESTION 3

Adele, an 8 year old girl, presents with a high fever. Physical examination reveals a membranous tonsillar exudate, generalised lymphadenopathy, hepatosplenomegaly and a faint macular rash. Which of the following would MOST LIKELY be found?

- Atypical lymphocytes in peripheral blood film

### QUESTION 4

Atticus, aged 18 months, presents with a fever of 38.3C but no focus of infection and no demonstrable abnormal physical signs. Which one of the following tests should be initially performed?

- Microscopy of urine