Child with a Fever

Possible causes

- <6months = high-risk because present with non-specific symptoms (lethargy/irritability, poor feeding, reduced urine output) and may look well even when very unwell
- Most viral
- Be wary of serious causes (!), if the child is very young and if there is no obvious source

Many other causes e.g. infectious mononucleosis, slapped cheek syndrome, pharyngoconjunctival fever, hand foot and mouth, measles, mumps, rubella, epiglottitis, scarlet fever, Kawasaki disease, encephalitis, rheumatic fever, endocarditis, malaria, TB, post-vaccination fever etc

History

- Paediatric history
- Include full systems review to find possible source
- Specifically ask: fever duration, feeding, hydration/toileting, medications, vaccination history

Examination

- Vital signs and weight
- Full multi-system exam (see general child assessment)
- Meningitis signs (bulging fontanelle <18months; Brudzinski’s sign)
- Look for rash (fully undress)
- Palpate spine (discitis)
- Irritable and can’t be consoled = raised intracranial pressure
- Dehydration signs: sunken fontanelle, dry mucus membranes, sunken eyes, absence of tears, reduced UO

<table>
<thead>
<tr>
<th>Amber flags</th>
<th>Red flags</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Stridor</td>
</tr>
<tr>
<td>B</td>
<td>Nasal flaring, tachypnoea, sats &lt;95%</td>
</tr>
<tr>
<td>C</td>
<td>Pallor, tachycardia, prolonged capillary refill, reduced OU, dry mucus membranes</td>
</tr>
<tr>
<td>D</td>
<td>Reduced activity, not responding normally to social cues</td>
</tr>
<tr>
<td>E</td>
<td>Rigors, fever in 3-6month old</td>
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</tbody>
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**Investigations**

- Only do investigations that will change management
- At risk groups
  - <3months = full septic screen regardless (including LP)
  - <6months or unwell = full septic screen if no source found
- Possible investigations – **BOXXES**
  - Bloods: FBC, CRP, U&E, cultures, VBG, glucose (hypoglycaemia common in unwell babies/infants)
  - Orifice tests: urine dip and culture (next thing to do if no source found in exam; parents to wait with sterile pot; in and out catheter may be used in young children if waiting too long); stool culture (if diarrhoea)
  - X-rays/imaging: CXR (if respiratory signs)
  - ECG (if HR>200 - ?SVT)
  - Special tests: lumbar puncture (if <3months or very unwell or meningitis suspected)

**Management**

- ABCDE management
- IV ceftriaxone cover if very unwell or <3months
- Treat cause if found
- Observe (± investigate) in hospital if no source found and any amber/red features
- Observe at home with strict advice to parents if no amber/red features, advise them to regularly check on child (even in night) and:
  - Offer regular drinks (continue breast feeds if breastfeeding) – **seek advice if child stops drinking**
  - Look for signs of dehydration e.g. dry mouth, no tears, sunken fontanelle – **seek medical advice if present**
  - Look for non-blanching rash (use glass) – **call emergency ambulance if present**
  - If child has convulsion – **seek medical advice**
  - If fever lasts >5days or child looks more unwell or parents concerned – **seek medical advice**
- Anti-pyretics

<table>
<thead>
<tr>
<th></th>
<th>NORMAL</th>
<th>&lt;1 year</th>
<th>1-2 years</th>
<th>2-5 years</th>
<th>5-12 years</th>
<th>&gt;12 years</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heart rate</td>
<td>110-160</td>
<td>100-150</td>
<td>95-140</td>
<td>80-120</td>
<td>60-100</td>
<td></td>
</tr>
</tbody>
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