Fever in Young Children

BACKGROUND

- Fever is by far the commonest presenting complaint in childhood
- Vast majority are due to viral illness
- Challenge is to distinguish the acutely unwell child with a serious bacterial infection from a well child with a common viral infection
- Use the **Traffic Light System** (NICE CG160) as a guide

ADVICE TO PARENTS

- Use paracetamol or ibuprofen in a febrile child who appears distressed
- Advise parents that antipyretics do not prevent febrile seizures
- Ensure adequate fluid intake
- Advise parent to seek further help if child deteriorates

MEASURING TEMPERATURE

- 0-4 weeks: Electronic thermometer in axilla
- 4 weeks-5 years: As above or infrared tympanic thermometer

SIGNS OF DEHYDRATION

- Capillary refill time >3 secs
- Reduced skin turgor
- Abnormal respiratory pattern
- Weak pulses
- Cool peripheries

REFERENCES

- NICE Guideline CG160 March 2013: *Feverish illness in children*
- NICE Guideline CG102 June 2010: *Bacterial meningitis & meningococcal septicaemia*

HISTORY

- Duration of fever
- Rash
- Colour: Pink, pale, mottled or blue?
- Associated symptoms
  - ✓ Seizure
  - ✓ Neck stiffness
  - ✓ Vomiting
  - ✓ Diarrhoea
  - ✓ Cough
  - ✓ Breathlessness
  - ✓ Dysuria
  - ✓ Abdominal pain
- Cry: Strong or weak?
- Social responses

EXAMINATION

- Expose the child fully and examine head-to-toe
- Vital signs including temp.
- Assess hydration
- Capillary refill time (<2 secs)
- Examine skin for rash
- Look for signs of meningism
- ENT exam
- Respiratory exam: signs of respiratory distress
- Palpate abdomen for masses/tenderness
- Joint exam: swelling, tenderness, paresis

INVESTIGATIONS

- Urinalysis
- Urine/blood cultures
- Chest X-ray if respiratory distress
- LP if meningitis suspected or under 3 months of age
- WCC/CRP non-specific

TREATMENT

- Refer to hospital if < 3 months
- Judicious use of antipyretics 4 hourly
- Empirical IV antibiotics if very ill in hospital

REFERRAL

- Age <3 months, temp >38°C
- Pale/mottled/ashen/blue
- No response to social cues
- Does not wake if roused
- Weak, high-pitched or continuous cry
- Grunting
- Tachypnoea: RR >60/min
- Moderate to severe chest indrawing
- Reduced skin turgor
- Non-blanching rash
- Bulging fontanelle
- Neck stiffness
- Status epilepticus
- Focal seizures
- Focal neurological signs

SUSPECTED MENINGITIS

- Children with suspected bacterial meningitis should be transferred to hospital immediately
- Give IM or IV penicillin as soon as possible if suspected meningococcal disease (meningitis with non-blanching rash or meningococcal septicaemia)
- Do not delay transfer to hospital to give antibiotics
- Withhold if history of anaphylaxis after a previous dose

TAKE HOME MESSAGES

- Go by your instincts and respond to significant parental anxiety
- Be wary of febrile infants already on antibiotics
- Expose child fully to examine for rashes
- Check urine of all febrile infants
- Always ask parent to seek review if later deterioration
- Beware of tachycardia in the quiet child