Paediatric Fever

Dr Kiranjeet Singh

FACEM PEM

Introduction

Most common paediatric presentation to ED

When is it a fever ?

How do we get it?

EXOGENOUS

ENDOGENOUS

Introduction

Why do we get it?

Beneficial !

Higher temperatures inhibiting growth/replication of pathogens

Higher temperatures promoting the immune response to infection

Bacteria are killed more easily by antibiotics at higher temperatures, so there is also a potential third mechanism.

Introduction

Fever vs reason

"The majority of children under 2 years of age with a high fever have a viral illness. About 3% of children under 2 years with a rectal temperature of > 38.9°C have a potentially serious bacterial infection.

Vaccines

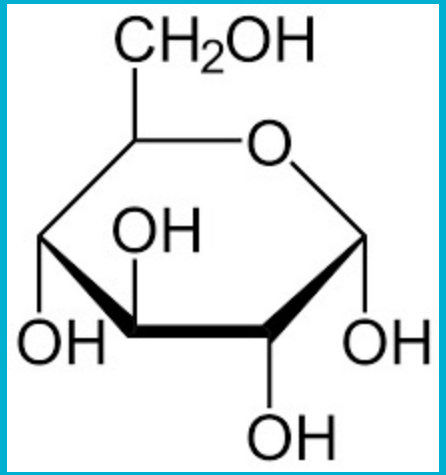
Neisseria, pneumococcal, Hib

Paracetamol

- Fever does not predict serious bacterial illness
- There is no evidence suggesting repeated measures of temperature are helpful. Therefore we should not 'routinely' repeat temperature measurement
- The height of the fever does not significantly change the risk of serious bacterial illness.
- Initial temperature measurement may help to inform us of the type of diagnosis
- However, independent of temperature recording, if child is:
  Miserable (+/- febrile) - treat with antipyretic/analgesic
  Happy (+/- febrile) - don't treat with antipyretic/analgesic
- If a child is febrile initially, there are very few situations where repeat measurements are likely to be required. If there is uncertainty about the diagnosis or a prolonged history of illness, repeated temperature measurements may be required. These should be specifically requested by the clinician (it is anticipated this will be a small percentage of children presenting to CED).
- If a child is afebrile initially, temperature measurements should be repeated only if there is diagnostic uncertainty (these should be specifically requested by the clinician).
- If an initially afebrile child becomes miserable, then they will need analgesia regardless of their temperature.

Sepsis

1. Early recognition
2. Rapid vascular access: Intravenous (IV) or intraosseus (IO) access within 5 minutes
3. Empiric antibiotic therapy: as soon as possible after access obtained
4. Rapid, judicious, fluid resuscitation: 20ml/kg fluid boluses of isotonic crystalloids (e.g. Normal saline or Plasma-Lyte 148) or albumin 4%
5. Early initiation of inotropes via peripheral access if shocked and not fluid responsive. Transfer to PICU as soon as possible
6. Source control (if possible): For example, to operating theatre as soon as stabilised if suspected abdominal source


CH2OH
O
OH
OH
OH
OH

SIRS

Temperature

> 38.5, < 36.0

Tachycardia, bradycardia

Tachypnoea, ventilatory support

Raised/depressed white cell count

Myths

Higher temperature indicates a serious infection

Myths

Unrelieved temperature by antipyretics indicates a serious bacterial infection

Myths

Rigours indicate a serious infection

Myths

You must be afebrile before hospital discharge

Myths

Fevers need antipyeretic treatment

Myths

Dont use antipyretics in fever


Oxford Dictionaries
Word of the Day
18/07/18
afebrile (adj.)
/eɪfiːbraɪl/
Not feverish.