APPROACH TO FEVER

OPEN PEDIATRICS™

Fever Basics

Fever can be measured via...

- **RECTAL** → Most accurate
- **ORAL**
- **INFRARED**
- **AXILLARY** → Least accurate

! Children/infants have a higher average temperature than adults (37˚C)

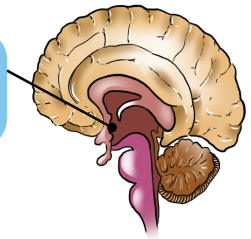
! Lower temperatures (<36˚C) do not preclude work-up in an ill-appearing patient!

Pathophysiology

Cytokine release

↓

Hypothalamus increases thermo-regulatory set point



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↑ Heat generation via
- ↑ metabolic rate
- ↑ muscle tone

↓ epidermal heat loss

Initial workup

Physical exam

Assess for signs of **altered perfusion:**

- Abnormal vital signs
- Altered mental status
- Mottled skin
- Delayed capillary refill

! If **ill-appearing** or **unstable vital signs** → consider treatment for sepsis: broad infectious workup, empiric antibiotics, admission to higher-level care

History

- Headache and photophobia
- Ear tugging or pain
- Sore throat
- Neck pain/swelling/decreased range of motion
- Cough and shortness of breath
- CVA tenderness or dysuria
- Focal abdominal pain
- Vomiting
- Diarrhea
- Focal limb or joint pain/swelling

! Always ask about immunization status!

Infants (<90d)

Risk for SBI = HIGHER

(Highest risk in infants <1 mo!)

Types of SBI

- UTI
- Bacteremia
- Meningitis
- Disseminated HSV infection

Most common infections

Common viral illnesses (RSV, rhino/enterovirus)

Initial evaluation

- Blood culture
- CBC, consider procalcitonin
- UA/UCx
- Consider CSF analysis (varies by institution, always performed in infants <1 mo)
- +/- HSV PCR

! Well-appearing patients with fever <8d and no clear source

FWS (fever without a source

Initial evaluation

Urine testing for high risk (girls <24 mo, uncircumcised boys <12 mo, circumsized boys <6 mo)

Age 3 - 36 mo

Risk for SBI = LOWER

Types of SBI

- Meningitis
- Osteomyelitis
- Septic arthritis
- Periorbital/orbital cellulitis
- UTI
- Pneumonia
- Skin infections

Once beyond 8d, this is called **fever of unknown origin (FUO)**!

Management

Do we treat fever?

Decision should be made on a case-by-case basis!

PROS	CONS
• Improved discomfort • Decreased insensible losses • Analgesia	• Delay to identifying underlying etiology • Drug toxicity • Allergy

! Do not use aspirin in children (with exception of very specific scenarios) due to risk of Reye's disease