

## EM Basic- Febrile Infants

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**Triage note-** fever at home?, exact age of patient, temp >100.4 is a fever, parental concerns, wet diapers in past 24 hours (at least 3 indicate good hydration, vomiting?, fussiness?, how are they feeding)

**Pediatric Assessment Triangle- ABC-** can be done from foot of the bed  
**Appearance-** Active vs. lethargic, good muscle tone vs. poor tone  
**Work of Breathing-** comfortable breathing vs. working hard to breathe  
**Color-** Pink vs. mottled, cyanosis, pallor  
If any one of these is abnormal, it demands immediate intervention

**Temperature-** under 28 days fever is rectal temp 100.4 F or 38 C  
**PEARL-** most guidelines give same weight to a tactile fever by parents  
Bundling with clothes does not significantly affect rectal temperature

**Birth history-** premature? Gestational age at birth, any birth complications?  
Vaccines up to date (2, 4, 6 months old), Growing or developing normally?  
Maternal STD history or GBS positive? (antibiotics during labor?)

**Physical exam-** beyond the pediatric assessment triangle- low yield in patients  
<28 days old, be sure to fully undress the patient and look for  
rashes/petechiae/vesicles, anterior fontanelle bulging, count respiratory rate  
(can use stethoscope), murmurs, abdominal tenderness, circumcised?

### Workup

**Under 28 days old-** "slam dunk"- labs, chest x-ray, LP, antibiotics, admit  
**29 days old to 3 months old-** can use criteria (A lot of clinicians LP all children under 60 days old)- selective workup + or – LP  
**Over 3 months old-** UA/UC, can let immunization status, exam be your guide

**Under 28 days old-** full septic workup  
CBC- WBC and platelet count  
Chem 10- low bicard = acidosis = sicker patient  
Cath UA and urine culture- white cells in the urine, nitrite  
Blood culture x1  
Chest x-ray  
LP- cell count, glucose and protein, gram stain, culture  
**PEARL-** even if obvious UTI or pneumonia, still need full workup (meninges can be seeded from those sources)

**Empiric antibiotics-** don't delay for LP (have at least 2 hours before LP results are affected by antibiotics)

### Under 28 days- Amp and Gent

**Ampicillin-** 50 mg/kg IV  
**Genatmicin-** 2.5 mg/kg IV  
**Cefotaxime** (alternative to Gentamicin)- 50 mg/kg IV

**PEARL-** Don't use ceftriaxone under 28 days or if born prematurely (immature bilirubin conjugation can cause kernicterus)

**Acyclovir-** 10mg/kg IV- given if patient has vesicles, neuro changes, seizure, thrombocytopenia, high CSF WBC count (pleocytosis), no clear guidelines on empiric dosing, talk with your peds consultant

**29 to 90 days old-** most clinicians will LP up to 60 days old, there are criteria to avoid LP and/or admission (Rochester, Philadelphia, Boston)

### Empiric antibiotics- Ceftriaxone and Vanc (1 month old to adult)

**Ceftriaxone-** 50 mg/kg IV  
**Vancomycin-** 20 mg/kg IV  
**Cefotaxime** (alternative to Ceftriaxone)- 50 mg/kg IV

**Over 6 weeks old-** consider **Decadron** 0.15 mg/kg IV- used to prevent deafness from H Flu meningitis, must be given within 1 hour of antibiotics, no firm guidelines on empiric treatment- talk with your peds consultant

**Over 90 days old-** if they have their 2 months vaccinations, can let exam and clinical judgment, if toxic then full septic workup

Must get catheterized UA and UC

**All females under 24 months**

**All uncircumcised males under 12 months**

**All circumcised males under 6 months (some guidelines test all boys under 12 months)**

## Tips on getting an LP on an infant

Consent parents- bleeding, infection, nerve damage (exceedingly rare)

Ask parents to leave the room, if they want to stay, have them sit down and explain what you are doing ahead of time and during procedure

Most important thing is the person holding the patient

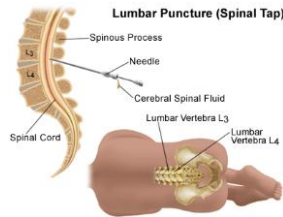
- Must use extreme flexion of neck and hips

- Place patient on pulse ox to prevent desaturation

Give the patient oral sucrose (sweet-eeze) to help patient

- Injected lidocaine does little to reduce pain and leads to increased attempts at LP

Same landmarks as adults- level with iliac crests at midline (L4/L5)



Can use retracted ballpoint pen to make a skin indentation

Prep with betadine, put on sterile gloves, drape and curl patient

Place thumb of left hand on superior vertebral body

Be sure patient is perpendicular to bed

Insert needle, remove stylet after first few millimeters of skin

Insert slowly, feel for pops

If you get fluid- get ½ cc per tube

If you get blood- let a few drops fall and see if it clears and collect it

If you hit bone, pull back until at skin surface and re-direct 5-10 degrees

towards head or towards sacrum

**TIGHTEN THE TUBES, LABEL THEM, WALK THEM TO THE LAB**

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