EM Basic - Febrile Infants

(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
Gentamicin- 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 catherized 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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