THE UNIVERSITY OF CHICAGO MEDICINE
Comer Children's Hospital
AT THE FOREFRONT OF KIDS MEDICINE

PEDIATRIC EMERGENCY DEPARTMENT CLINICAL GUIDELINE: FEVER IN INFANTS (29-60 days)

Population and Definitions:

- Includes infants 29-60 days
- Includes infants with a history of fever of 100.4°F (38°C) or greater
    - Includes fever measured at home, whether it is present in the ER or not
    - Includes fever measured axillary, tympanic, cutaneous (forehead), or rectal without adding or subtracting any degrees
    - Does not include tactile temperatures with or without fussiness (see separate section)*

Perinatal History:

- Gestational age, type of delivery, location/hospital of delivery
- Prenatal care, maternal cultures/infections/antibiotics
    - Specifically ask about Group B Strep and Herpes (both history of and new outbreaks as well as current symptoms)
- Infant cultures/infections/antibiotics
- Maternal and infant length of stay/complications

Recent History

- Fever details
- Feeding, activity, fussiness
- Wetting, stools
- Infectious contacts

Physical Examination:

- Rapid cardiopulmonary assessment
- Assessment of hydration and perfusion
- General physical examination for evidence of focal infection
- Examination for presence of jaundice, hepatospenomegaly, or skin lesions

Diagnostic Evaluation:

- CBC/diff, BCx and IV lock
- Cath U/A and Cx (or suprapubic tap, but not a bagged specimen)
- Strongly consider LP if pt will be receiving antibiotics prior to dispo
- CXR only if respiratory symptoms
- NP swab for RSV, influenza, paraflu if indicated (season and/or symptoms)

Disposition Assignment:

- LP, Antibiotics and Admission recommended for any of the following:
    - Historical features
        - Poor feeding, lethargic/irritable, "not acting right"
        - History Group B Strep positive, mother or child getting antibiotics
        - Significant co-morbidities
    - Physical findings
        - Infants with abnormal exam findings
        - Unexplained irritability or lethargy
        - Unexplained tachycardia or tachypnea
        - Evidence of focal infection (cellulitis, UTI**, pneumonia, OM)

- Laboratory findings
  - CBC: WBC < 5,000 or > 15,000
  - U/A: > 8 WBC/hpf and/or the presence of bacteria
  - LP: > 8 WBC/hpf, or the presence of bacteria on gram stain
  - CXR: discrete infiltrate
- Social/Follow-up Concerns
  - Concern of parental observation skills
  - Concern of ability or willingness to return for follow-up evaluation within 24hrs

** Some clinically well-appearing infants with confirmed UTI may be appropriate for discharge home on antibiotics if they have a peripheral band count of <1250 cells per µL and ANC ≥1500 cells per µL on CBC/diff and **can ensure 24 hour follow-up and reliable contact information**. (Febrile Infants with Urinary Tract Infections at Very Low Risk for Adverse Events and Bacteremia; *Pediatrics,* 2010)

- **Antibiotics**:
  - **Ampicillin 50mg/kg/dose q 6hrs IV/IM**
    - Recommended to cover Listeria up until approx 6wks (pending culture results)

AND/OR

  - **Ceftriaxone 100mg/kg/dose q 24hrs IV (or IM) (age > 4wks)**

  - Consider adding Vancomycin 15mg/kg/dose IV if infant is critically ill or if mother or child were previously treated with antibiotics for Group B Strep (resistant organisms)
  - Consider adding Acyclovir 20mg/kg/dose IV if infant is critically ill, seizing, or mother has a history of herpes
    - Seen early – classically within the first 1-3 weeks of life; generally not after the age of 4 weeks.
    - LFT's may be elevated – particularly SGPT (systemic herpes infection)
    - Send HSV PCR on CSF if starting acyclovir

Discharged Infants & Management:

- Antibiotics may be safely withheld from infants that are to be discharged provided that all of the above findings are absent (Philadelphia Protocol - Baker et al, 1999), however individual decisions are left to the discretion of the supervising attending.
- If antibiotics are given at discharge, strongly consider obtaining CSF studies prior to administering antibiotics
- All infants under 60 days that are to be discharged must have guaranteed follow-up within 24hrs. If you are unable to contact or guarantee a follow-up with a PCP, the parent should be instructed to return to the ER within 24hrs for follow-up, preferably at a specific time that will ensure no lapses in antibiotic coverage.

* Special Scenario - Tactile Fevers & "Fussy Babies" without documented fevers

- History and Physical examination are essentially the same
- Laboratory evaluations are variable, and there are no standardized recommendations. The most common finding in this group of neonates (without documented fever in the ER, but with reported tactile fever and historical fussiness reported by family is the occasional finding of a UTI).
- CBC, BCx, Cath U/A and Cx is therefore a reasonable consideration, particularly if the baby does seem to be irritable, but not mandatory.

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DISCLAIMER:

This clinical guideline has been developed for the purpose of unifying the general emergency care of infants with fever. It is intended to aid, rather than substitute for, professional judgment. It is not intended to serve as a rigid protocol or a written proxy for the standard of care. Failure to comply with this guideline does not represent a breach of the standard of care.