

# LP in neonatal fever To do or not to do? (Con)

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Nisit Trisdikoon, MD

Division of pediatric infectious disease

Department of pediatric

Suranaree university of technology hospital



# Serious bacterial illness (SBI)

Cellulitis

Urinary tract infection

Pneumonia

Bacteremia

Bacterial  
gastroenteritis

Bacterial  
meningitis





## What's change

### Clinical Practice Guideline: Evaluation and Management of Well-Appearing Febrile Infants 8 to 60 Days Old

Robert H. Pantell, MD, FAAP,<sup>a</sup> Kenneth B. Roberts, MD, FAAP,<sup>b</sup> William G. Adams, MD, FAAP,<sup>c</sup> Benard P. Dreyer, MD, FAAP,<sup>d</sup>  
Nathan Kuppermann, MD, MPH, FAAP, FACEP,<sup>e</sup> Sean T. O'Leary, MD, MPH, FAAP,<sup>f</sup> Kymika Okechukwu, MPA,<sup>g</sup>  
Charles R. Woods Jr, MD, MS, FAAP<sup>h</sup> SUBCOMMITTEE ON FEBRILE INFANTS

- Changing Bacteriology
- Cost of Unnecessary Care
- Advances in Testing  
(Inflammatory Markers, Pathogen Identification, Viral Testing, Emerging Technologies)
- Opportunities to Improve the Care of Hospitalized Infants
- Evolving Research Strategies

# Evolving Research Strategies



1980s

Recommended infants in the youngest group (<29 days of age) should receive extensive evaluations, hospitalization, and empirical antimicrobial treatment

AAP 2021

• EVIDENCE FOR AGE-BASED RISK STRATIFICATION

3 Algorithm

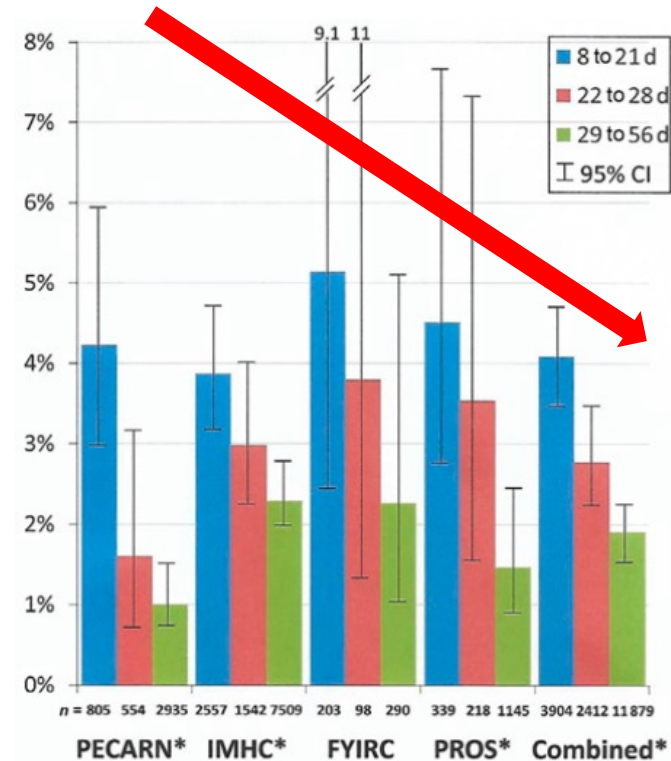
1. Age 8-21 days
  2. Age 22-28 days
  3. Age 29-60 days
- } Neonatal period

Lumbar puncture ??



## Risk of Invasive bacterial infection

22-28 day-old infants capable of identifying infants at low risk for IBIs ranging from 0.2-0.7%



**FIGURE 4** Rate of bacteremia by age groupings. \*  $\chi^2$  for trend:  $P < .001$ . Note that the 95% CIs in the combined group do not overlap. Data were adapted from reference 61; from reference 94, with detail provided by C.L.B. (personal communication, 2020); from reference 24, with detail provided by Paul Aronson (personal communication, 2020); and from reference 17, with detail provided by Matthew Pantell (personal communication, 2020). FYIRC, Febrile Young Infants Research Collaborative; IMHC, University of Utah/Intermountain Healthcare.