When an infant under three months of age presents with acute otitis media (AOM) in the absence of fever, do you evaluate for an invasive bacterial infection by obtaining a blood culture and/or cerebral spinal fluid (CSF) culture? McLaren et al (10.1542/peds.2020-1571) analyzed data collected in 33 pediatric emergency departments (EDs) in the Pediatric Emergency Medicine Collaborative Research Committee of the AAP from 2007 to 2017.

Of the 1,637 infants who had afebrile AOM, 278 had blood cultures drawn and 102 had CSF cultures obtained. The good news is that none of the infants had positive cultures suggestive of an invasive bacterial infection (IBI), although over the 30 days after being seen, one child developed lymphadenitis and another culture-negative sepsis. As you might expect, infants over a month of age were less likely to be cultured.

So, should we not routinely assess for IBI in afebrile infants with AOM based on this study? We asked Drs. Joseph Ravera and Martha (Molly) Stevens, pediatric emergency medicine specialists, to share their thoughts in an accompanying commentary (10.1542/peds.2020-039602). They note the strengths of this study but also some limitations. We know that there is significant variation in how clinicians establish the diagnosis of AOM. Furthermore, in this study, "erythema" in a chart note was felt to be consistent with AOM when it may simply be due to an infant crying if mobility of the tympanic membrane is not documented in the medical record. In addition, only 6% of the sample in this study were 28 days of age or younger so the generalizability of the study findings for the youngest children, who are also at the greatest risk, is uncertain.

Hopefully this study will provide an earful of conversation among all of us and lead to prospective studies that will confirm what is inferred from the findings in this study—that further diagnostic testing in nontoxic appearing afebrile infants less than or equal to 90 days of age with AOM will be "ear today and gone tomorrow."

- Performance of the Modified Boston and Philadelphia Criteria for Invasive Bacterial Infections
- A Prediction Model to Identify Febrile Infants 60 Days at Low Risk of Invasive Bacterial Infection
- Clinical Prediction Rule for Distinguishing Bacterial From Aseptic Meningitis
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