So What is Causing Otitis Media in the Post Pneumococcal Vaccine Era?
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With the availability of the pneumococcal vaccine, the hope was that we would see a decrease in bacterial causes for otitis—but is that what has really happened? Kaur et al. (10.1542/peds.2017-0181) document changes by confirming bacterial etiology with tympanocentesis for culture of tympanic fluid in a prospective cohort of children with acute otitis followed from 6 to 36 months of age over a 10 year time period (June 2006-June 2016) in one pediatric practice in Rochester NY. The investigators not only describe important bacterial trends and changes involving Streptococcus pneumonia, Haemophilus influenza, and Moraxella catarrhali, but also describe risk factors for who is prone to having a bacterial acute otitis in the era of pneumococcal conjugate vaccines. The good news is that the overall incidence of otitis is declining. The pathogens causing otitis media are also changing along with this decline (e.g. with an uptick in serotypes of pneumococcus not in the current vaccine). The interesting news is that this study, though rigorous in its methodology, did not follow AAP guidelines which do not call for tympanocentesis or the use of amoxicillin-clavulanic acid which was used in this study as first line. To provide some perspective on the strengths (and they are laudable) and the limitations of this study, check out the accompanying editorial (10.1542/peds.2017-1966) by Drs. Richard (Mort) Wasserman and Jeffrey Gerber who put this study into even greater perspective. Please read both the study and commentary which together may enable you to share the information with your patients (who will hopefully lend an ear) so that they can recognize how the evidence-based findings in this study add import to the need to vaccinate all children against the bacterial pathogens that are associated with acute otitis media.