

**Letter to the Editor:**

The Bacterial Etiology of Otitis Media and Specimen Collection

Dear Editor,

We read the study by Kim SH and colleagues (1) on the bacterial species and antibiotic sensitivity in acute otitis media (AOM) and otitis media with effusion (OME) with great interest. However, we have some comments regarding this study.

First of all, middle ear fluid obtained either by tympanocentesis or, in patients with otorrhea or myringotomy tubes, by collecting drainage on mini tipped swabs directly after cleaning the ear canal should be used in microbiological diagnose of AOM and OME. Swabs are not recommended (2). However, the authors collected samples using an extra-thin flexible wire swab, from an area near the tympanic membrane or the perforation site of the tympanic membrane. We think that this sample collection method affects their results. As the authors declared, the external auditory canal is predominantly occupied by gram-positive bacteria and most of them are coagulase negative *Staphylococcus* (3). While gram-positives such as *S. aureus* and *S. epidermidis* were found in 24.7% and 94.6% of healthy individuals, gram-negatives such as *Escherichia coli* and *Pseudomonas aeruginosa* were found in 5.4% and 3.2% of the healthy population (4). In our opinion, normal flora of external auditory canal affected their results due to sample collection method. If they obtained middle ear fluid, their results would be much more valid.

Secondly, *S. aureus* strains which were resistant to cefoxitin should be called methicillin resistant *S. aureus* (MRSA) (5). But, in the study cefoxitin resistance was found in three *S. aureus* isolates that identified as methicilline susceptible. These strains should also be classified as MRSA.

Thirdly, in the result section, they wrote: "The most frequently isolated bacterial species was coagulase negative *Staphylococcus aureus* (CNS), ..." One of the most basic features of *S. aureus* is coagulase positivity. If these bacteria are coagulase negative, they cannot be called *S. aureus* and if they are *S. aureus*, then they cannot be coagulase negative. They should explain which of these is true.

Finally, they said in the result section that 18 (3.2%) and 15 (12.3%) OME and AOM samples were positive for fungi, respectively. But they represented this percentage as 18 (32.1%) for

OME and 33 (48.3%) for total in Table 1 of the article (1). According to sample size the former percentage is true. However, they referred to these percentages again as 12.3% for AOM patients and 32.1% for OME patients in the discussion part. Also, they compared these wrong results with other studies. These rates cause confusion. The authors need to clarify the ratios and compare the correct ratios in the discussion part.

DISCLOSURE

The authors have no potential conflicts of interest to disclose.

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