

## Antibiotic susceptibility of bacterial pathogens in otitis media

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The antibiotic susceptibility of aerobic and anaerobic bacteria isolated from patients with otitis media was done by the disk diffusion and E-test methods. The choice of antibiotics was based on availability in our environment, clinical outcome and rare prescriptions following relapses with first-line drugs. Amongst the aerobes, streptococci and haemophili were highly susceptible to all the antibiotics including amoxicillin. Strains of *Staphylococcus aureus*, *Escherichia coli*, and *Moraxella catarrhalis* resistant to amoxicillin and the cephalosporins were sensitive to amoxicillin-clavulanic acid combination, ciprofloxacin and tigecycline. *Pseudomonas aeruginosa* and *Klebsiella pneumoniae* showed high level resistance to the  $\beta$ -lactam and  $\beta$ -lactam- $\beta$ -lactamase stable drugs; however 85 to 98% of *Klebsiella* isolates were sensitive to either ciprofloxacin or tigecycline. The anaerobes were generally sensitive to amoxicillin-clavulanic acid combination and metronidazole. Resistance occurred in 10% of *Bacteroides thetaiotaomicron*, *Bacteroides ureolyticus*, *Prevotella melaninogenica* and *Peptostreptococcus magna*. Amoxicillin activity against the anaerobes was low (<10% in most cases) except for anaerobic cocci with activity as high as 80%. Activity of the cephalosporins for the anaerobes was staggering. The high level of resistance against the  $\beta$ -lactam antibiotics was associated with  $\beta$ -lactamase production by the pathogens.

### Biography

Egwari L. O is a Professor of Medical Microbiology at Covenant University with specialization in anaerobic bacteria in human infections. He is the director of Research and Development in Covenant University and has published many papers in reputable journals. He is a member of Anaerobes Society of the Americas.

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