

objectives:

A study of bacterial isolates cultured from diabetic foot infections and assess susceptibility to the commonly used antibacterial agents.

METHODS:

this is a retrospective study with a review of the bacteriology results of specimens taken from 108 mellitus diabetic patients with diabetic foot infections at Imam khomeini hospital in Tehran during 2003-2006. the specimens were cultured using optimal aerobic microbiologic techniques. Antimicrobial susceptibility testing to different agents, was carried out using the disc diffusion method.

RESULTS:

Staphylococcus aureus was the commonest isolated being recovered from 25% of cases. the other organisms isolated were Pseudomonas aeruginosa 17%, Proteus mirabilis 14%, Enterococcus 8%, Streptococcus 9%, Klebsiella & Negative coagulase staphylococcus each 5%, E. coli and Enterobacter and Morganella each 4%.

The antimicrobial susceptibility testing showed that Vancomycin was the most effective against gram positive and Imipenem was the most effective against gram negative organisms.

CONCLUSION:

Staphylococcus aureus, Pseudomonas aeruginosa and Proteus mirabilis were the most common causes of diabetic infections.

these wounds require use of combined antimicrobial therapy for initial patient treatment prior to susceptibility results.