**Original article:**

**Bacteriological profile of diabetic foot infections in a teritiary care teaching hospital**

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Date of submission: 19 June 2014 ; Date of publication: 15 September 2014

**Abstract:**

**Introduction:** India has a diabetic population of about 50.8 million, which is expected to increase to 87 million by 2030.Diabetic foot infections are among the most common bacterial infections encountered in patients with diabetes mellitus. Hence, this study was carried out to determine the frequency of aerobic bacterial isolates from diabetic foot ulcers and their antibiogram.

**Materials and methods:** This was a prospective study conducted on clinical specimens which were taken from 56 patients with diabetic foot infections, over a six months period. The clinical specimens were processed by using the standard microbiological techniques. The anti-microbial susceptibility pattern was studied by the Kirby-Bauer disc diffusion method.

**Results:** Among 56 cases, 33(58.73%) had mono-microbial infections, 16(28.57%) had poly-microbial infections, and 7(12.5%) had sterile culture. Among bacteria isolated, 34(52.31%) were Gram negative and 31(47.69%) were Gram positive. All Gram negative bacilli showed good sensitivity to Imipenem,Piperacillin-Tazobactum and Amikacin. All Gram positive cocci remained 100% sensitive to Vancomycin followed by Amikacin and Clindamycin in a range of 71.4 % to 100%.

**Conclusion:** Gram negative bacilli were predominantly isolated from diabetic foot ulcers. Piperacillin-Tazobactum and Amikacin would be essential for the empirical treatment.

**Key words:** Diabetic foot ulcers, Gram negative bacilli, Antibiogram