

**TITLE:** MICROBIOLOGICAL PROFILE OF ULCERS INFECTED IN PATIENTS WITH DIABETIC FOOT

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**ABSTRACT:**

Diabetic foot is the major cause of hospitalization and financial cost in the diabetic population and is considered a serious public health problem. Between 40% and 80% of foot ulcers in diabetic patients may be complicated by infection that is considered a clinical marker of systemic impairment and mortality. The microbiological profile of diabetic foot infections often shows complex polymicrobial infection. The objective of this study was to identify the microbiological profile of infected diabetic foot ulcers. This is a descriptive, retrospective study of 189 patients admitted to the Vascular Surgery Unit of Hospital Risoleta Tolentino Neves from January 2007 to December 2012. The patients included were those who were admitted at the Hospital with diabetic foot ulcer. Demographics and clinical data were extracted from the Electronic Medical Records. The Statistical Package for Social Sciences (SPSS) software was used for descriptive statistical analysis. Ethical approval was granted for this study from the Universidade Federal de Minas Gerais Ethics Committee. The mean age of patients was  $61.9 \pm 12.7$  years, mostly males (64.6%), with mean serum creatinina level of  $1.95 \pm 1.8$  mg/dL and average level of serum hemoglobin of  $8.93 \pm 2.6$  g/dL. Of these patients, 86.8% had positive culture, and 72.0% were monomicrobial cultures and 21.2% had reinfection. The most common genres of bacteria were *Acinetobacter spp.* (24.4%), *Morganella spp.* (24.4%), *Proteus spp.* (23.1%) and *Enterococcus spp.* (19.2%) and species were *Acinetobacter baumannii*, *Morganella morganii*, *Pseudomonas aeruginosa* and *Proteus mirabilis*. The readmission rate was 42.9% and the mortality rate was 15.9%. It was identified, therefore, that in the cultures of deep tissue carried ulcers in the feet of diabetic patients, Gram-negative bacteria were the most prevalent.

**Keywords:** bacteria, diabetic foot, foot ulcer, infection

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