

Retrospective microbiological analysis of wound infections in diabetic foot syndrome

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Aim: Estimation of pathogens profile at patients with ulcerations between 2001 to 2005.

Methods: The study group was composed of 600 patients with diabetes type 1 (72) and type 2 (528). The mean duration of diabetes was 15 years. All patients developed diabetic foot ulceration based on neuropathic etiology. Results: Microbiological investigations of 1592 culture samples were positive in 1219 samples. Different 78 pathogens were isolated. The commonest isolates belonged to the gram-positive species 52.7%, gram-negative species 40.5%, fungal species 6.6%. The primary causes were *Staphylococcus aureus* (isolated from 214 samples – 17.56%, out of which 21.2% were MRSA), *Enterococcus faecalis* (isolated from 69 samples - 5.59%), *Peptostreptococcus spp.* (from 65 samples - 5.59%), *Esherichia coli* (from 57 samples - 4.68%), *Proteus mirabilis* (from 55 samples – 4.51%). The relative decrease in frequency of *S. aureus* isolation was observed in the study period, from 20% in 2002 to 14.48% in 2005. Conversely the frequency of *E. faecalis* infections increased from 3.91% in 2002 to 6.69% in 2005, the *Peptostreptococcus spp.* frequency increased from 4.78% to 6.13% and *Candida parapsilosis* emerged as an important ethiological agent (from 0.87% to 3.90%). In elder (over 70) patients most commonly isolated species were: *Enterobacter cloace* and *Esherichia coli*. Conclusions: (1) In 2002-2005 decrease the role of *Staphylococcus aureus* as an ethiological agent in DFS infections, the MRSA increased in the same period; (2) frequent colonization of gastrointestinal species in elder patients may indicate the poor hygiene

