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**Antibiotic susceptibility patterns among isolates from infected diabetic foot ulcers through 5 years**

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**Background and aims:** Uncontrolled infection is among the most important causes of diabetic gangrene and amputation. Targeted therapy with narrow-spectrum antibiotic therapy reduces the risk for development of multiresistant bacterial strains. Surveys on bacterial flora in a certain region can guide the decision for the initial empiric antibiotic treatment. We investigated the antibiotic susceptibility patterns of the isolates obtained at our out-patient diabetic foot clinic in the period 2004 - 2009.

**Methods:** Data from the routine workup of 519 diabetic foot ulcer patients with local signs of infection were analysed with respect to the species and number of isolated pathogens, and antibiotic susceptibility. **Results:** The swabs yielded  $2.10 \pm 1.40$  isolates per sample. 53 swabs (10.21%) were sterile. Staphylococci represented on average 38.9% (32.2% - 46.4%) of all isolates, Streptococci 16.3% (12.2% - 20.1%), Enterobacteriaceae and Gram negative bacilli 19.9% (14.4% - 26.2%), Diptheroids 10.0% (8.3% - 11.1%) and anaerobes 14.9% (13.9% - 17.0%). The percentages differed significantly among the years ( $p=0.002$ ). Susceptibility testing was carried out in accordance to the expected antimicrobial spectrum so not all the isolates were tested to all antibiotics. Staphylococci were sensitive to co-amoxiclav in 73.3%, ciprofloxacin in 82.8%, clindamycin in 77.3%, TMT/SMX in 89.9%, vancomycin in 99.7% and to moxifloxacin in 83.7%. Gram negative organisms were susceptible to ciprofloxacin in 86.9% and moxifloxacin in 78.6%. Anaerobic isolates were susceptible to co-amoxiclav in 99.3%, ciprofloxacin in 100%. The susceptibility patterns for co-amoxiclav, ciprofloxacin, clindamycin, trimethoprim /sulphamethoxazole, vancomycin and moxifloxacin have not changed significantly through the observed period (all  $p > 0.05$ ). **Conclusions:** The level of resistance to antimicrobials in the observed population remains reasonably low and confirms that the antibiotic prescription policy at our out-patient foot clinic is appropriate.