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**Analysis of wound cultures from infected diabetic foot ulcers.**

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**Background:** One of the most important causes of diabetic gangrene and amputations is uncontrolled infection. Analysis of all wound cultures and its antibiotic sensitivity in each of diabetic foot clinic can guide the decision for the initial empiric antibiotic therapy. Monitoring of wound cultures in each of infected diabetic foot ulcers can help to prescribe the antibiotic treatment correctly and to control hospital infection. **The aim:** To analyse dynamic of wound cultures and its antibiotic sensitivity, prescriptions of antibiotics and to determine the new cases of multiresistant bacterial strains during treating in our diabetic foot clinic. **Methods:** data from the routine work-up of 164 ulcers or postoperative wounds in 158 diabetic patients with local signs of infection (during the period from 2007 to June 2011). 74 % of the patients have got ineffective treating of the same ulcers and wounds previously before administration to our clinic.

**Results:** Only 13 (5,13%) of swabs taken before treatment in were sterile. The most frequent pathogens: Staph aureus on average is 35,4%, Coagulase-negative Staph - 6,5%, Streptococci - 11,85%, Enterobacteriaceae - 4,6%, Nonfermentative bacteria (Pseudomonas, Acinetobacter) - 8,1%. MSSA were sensitive to amoxiclav in 100%, clindamycin - 69,4%, ciprofloxacin - 71,2%, levofloxacin - 84%. Staph aureus was MRSA in 48,6 % of cases (only in 2 cases of MRSA was not sensitive to vancomycin). Gram negative cultures were sensitive to amikacin in 91%, ciprofloxacin in 71,2%. To analyse dynamic of wound cultures and antibiotic sensitivity of our patients during treatment in our clinic we determined only 4 (2,4%) new cases of multiresistant bacteria (incl. cases with MRSA). **Conclusion:** Low rate of new cases of multiresistant bacteria due to treatment in our clinic confirms that our antibiotic prescription and preventive measures of hospital infection were appropriate. Nevertheless, for reduction of multiresistant bacteria in population of diabetic patients in our environment we need more closer collaboration between all specialists who are treating the diabetic foot patients.