

Pathogens of deep diabetic foot infection in surgery patients

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Purpose: We investigated specificity of pathogens in patients with diabetic foot deep infection who was required hospitalization and surgery intervention. **Methods:** We analyzed cultures of 201 inpatients who were hospitalized at the diabetic foot surgery department of City Hospital № 14 from September 2012 to May 2013. 152 patients were primary and 49 had already required previous surgery interventions on foot. All patients had deep diabetic foot infections, underwent surgery debridement, and 63.2% and 62.5% of them were amputated. Major amputations were performed in 26.6% and 33.3% patients respectively. Mean duration of hospitalization was 25.3 ± 17.2 days (1-90 days). Cultures were obtained after surgery interventions immediately and on 10-14 days of hospitalization. We also analyzed cultures of 102 diabetic foot outpatients with post surgery wounds after discharge from the Hospital. **Results.** *St. aureus* was the most frequently isolated in primary patients (59% of cultures), including MRSA in 13.5%. Gram-negative bacilli were found: *Acinetobacter baumannii* in 20.5% cases, *Enterococcus faecalis* in 16%, *Pseudomonas aeruginosae* in 13.6%. *St. aureus* was the most frequently isolated in patients with previous history of surgery interventions too (75.7% cultures), including MRSA in 39.3%. *Acinetobacter baumannii* and *Enterococcus faecalis* were obtained in 35% specimens, *Pseudomonas aeruginosae* in 27%. After 14 days of hospitalization *St. aureus* was isolated in 47% and 62% specimens respectively, including MRSA in 33.3% and 61%. *Acinetobacter baumannii* was obtained in 27,6% and 36%, *Enterococcus faecalis* in 55% and 59% specimens respectively. Post surgery wounds were clinically infected in 55.9% outpatients. *St. aureus* was isolated in 78% specimens, including 53.1% MRSA. *Acinetobacter baumani* was obtained in 24.4% cultures, *Enterococcus feacalis* in 29.3%, *Pseudomonas aeruginosa* in 24.4%. **Conclusions.** The infections of surgery patients are polymicrobial. *St. aureus* is most frequently isolated pathogen. The prevalence of MRSA and gram-negative bacilli (*Acinetobacter baumannii*, *Enterococcus faecalis*) should be taking into account for patients with previous history of surgery interventions and with infected post surgery wounds.