Acute diabetic foot infections: two years experience of a Diabetic Foot Center A. Da Porto², R. Da Ros¹, R. Assaloni¹, C. Miranda⁴, B. Brunato¹, S. Carlucci¹, S. Borga³, C. Tortul¹ F. Fontana³. 1. Diabetic Center Monfalcone; 2. Internal Medicine Udine; 3. Microbiology Service Monfalcone. 4. Diabetic Center Pordenone; Italy.

Introduction: The acute foot infection represents one of the most dangerous complications related to diabetic people. A rapid diagnosis and an immediate treatment are essential steps for reducing major amputations and mortality affecting this kind of patients. Aim of this study is to evaluate clinical characteristics and outcomes of diabetic patients who were evaluated in our diabetic foot clinic during the last two years. Material e Methods: We evaluated 130 patients with deep acute foot infection who were treated in Monfalcone's Diabetic Foot Center between years 2010-11. These subjects underwent to immediate surgical wound debridement and deep tissues samples were collected to microbiological tests. Afterwards, empirical antimicrobial therapy was assessed. Moreover we screened our patients for peripheral neuropathy (by biothesiometry), peripheral artery disease (by Doppler ultrasound analysis) and we collected data relatively their clinical history. Results: Our population was constituted by 106 man and 24 women mean aged of 71.9 year; 94% of the subjects were affected by type 2 diabetes whereas the other 6% by type one; mean duration of diabetes was 20,9 years, mean Hba1c levels were 7,6% . 77% of our population had ultrasonography evidence of peripheral artery disease and 85% had peripheral neuropathy. 55,5% of people had been affected by preexistent wound for a mean duration of 77,2 days; at the first evaluation 47,7% had deep abscess or fistulas. At the moment of the diagnosis 34,6% of patients were already under antimicrobial treatment. The microbiological samples showed us the following results: 64,3% of infections were sustained by gram + , 21,8% by gram - and 13,2% by anaerobes. The most frequently isolated bacteria were S. Aureus among gram + , E. Coli among gram - and Bacterioides Fragilis among anaerobes. Patients with deep tissue abscess had a significantly higher proportion of infection sustained by S. Aureus (59,1% vs 32,7% p= 0.006). 4,8 % of patients underwent to Chopart amputation, 15,6% to transmethatarsal amputation, 45,4 to ray amputation and 31,2 % to a finger amputation. Only one subject was treated with a below knee amputation. Conclusions: In our population, patients with deep infection have a long lasting history of diabetes, had frequently peripheral artery disease, peripheral neuropathy and history of chronic wounds. Gram positive bacteria most frequently sustain diabetic foot infections and S. Aureus is involved in the most severe ones. The rapid surgical and medical treatment (conducted by a trained team) demonstrate efficacy in preventing major amputations in these patients.