**[P05] PLASMATIC SCALPEL IN THE SURGICAL TREATMENT OF DIABETIC FOOT OSTEOMYELITIS**

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**Aim:** The aim of the study was to evaluate the outcomes of surgical treatment of diabetic foot osteomyelitis using plasmatic scalpel.

**Method:** We presented 79 diabetic foot cases with osteomyelitis ofmetatarsal bones. Patients were treated in General Surgery Department from 2010 till 2014.The mean age of the patients was 65±11 years. All the patients had diabetes II type. Chronic osteomyelitis was diagnosed on the basis of bone biopsy, MRI, X-ray and clinical signs. Patients were randomized in 2 groups. Surgical treatment in 1 group (n=40) included osteonecrectomy with plasmatic scalpel. In group 2 (n=39) plasmatic scalpel was not used. Postoperative regimen included antibiotics by Amoxicillin/Clavulanic acid for 14 days, immobilization for 1 month and dressings with 1% povidone-iodine solution. Follow-up period was 6 months.

**Results/Discussion:** Such complications as surgical site infections, recurrence of osteomyelitis and amputations were observed in group 1 in 22,5% in comparison with 35,9% in control group. The recurrence was found in 12,5% and 20,5% cases respectively. The surgical site infections were diagnosed in 10% in group 1 and in 12,8% in group 2. Amputations were performed in 0% and 2,6% cases in two groups respectively. Surgical intervention using plasmatic scalpel in diabetic patients with osteomyelitis of metatarsal bones is characterized by low rate of infectious complications, recurrence of osteomyelitis and amputations.

**Conclusion:** The plasmatic scalpel is an effective and safe approach to manage chronic metatarsal osteomyelitis in diabetic foot patients.