

MEETING ABSTRACT

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Role of a medication in polyurethane foam in the treatment of diabetic foot lesions

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Background

The treatment of diabetic foot lesions need medications capable of managing wound infection and exudates that, variously combined, can influence the natural history of the pathology and therefore limb survival. A particular and economic device, is represented by honeycomb structure polyurethane foam Ligasano ©.

Material and methods

We evaluated 5 patients with a diabetic foot and a case history of infected wounds until flemmone. The lesions have been debrided and/or surgically drained and then medicated three time a week, with variable thickness Ligasano (0,5 and 1 cm). Tissue sample was collected to perform colture and antibiogram. According to diabetic foot guidelines of Consensus Conference 2003 patients (3 male and 2 female – mean age 54,3 years) were affected by skin lesions of the foot and were classified as in Table 1. Medications were performed until the reduction and/or complete healing.

Table 1

Complications	Number of patients
glycometabolic failure	4/5
cardiovascular complications	3/5
kidney disease	1/5
rethinic disease	2/5

Results

The patients have been medicated once a day for 10 days (2, 5) and/or once every three weeks (3/5) for the first two months. The mean time of the treatment was of 196 day for 4 patients. In 1 patient a minor cardiovascular event occurred and time of therapy was 296 days.

Conclusions

In our experience the device was proved to be economic and manageable, allowing the management of the exudates and avoiding, at the same time, the involvement of the perilesional skin that constitutes itself an innovation on the treatment of diabetic foot lesion.



Figure 1 Plantar lesion.

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Figure 2 Infected lesion of the dorsum of the foot onset because the patient wears unqualified shoe.



Figure 3 Infected lesion with tendons exposure.



Figure 4 Flemmone of the left foot surgically drained and treated with antibiotic therapy and intracavitary Ligasano.

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