

# TREATMENT OF DELAYED HEALING ARTERIAL ULCERS WITH THE NEW NOSF LIPIDO-COLLOID DRESSING \*

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## INTRODUCTION

The healing of arterial wounds is generally slow and studded with periods of stagnation, or even exacerbation. It is generally difficult to achieve complete healing when a revascularisation procedure is not possible. Here we report our experience of a new dressing, **URGOCELL® START**, which combines lipido-colloid technology (TLC – URGO patent) with an innovative compound, NOSF, a metalloproteinase inhibitor indicated in delayed healing chronic wounds.

## PATIENTS AND WOUNDS

Patients with occlusive peripheral arterial disease, with an average age of over 75 years (77 years). The history includes: former smoking (1/3), insulin-dependent diabetes who was very significantly overweight (1/3), moderate overweight (1/3), anterior femoro-tibial bypass 4 months previously (1/3), bilateral stripping (1/3). These patients present arterial or mixed (1/3), predominantly arterial ulcers and a wound over a transmetatarsal amputation (1/3). The wounds had been present for an average of 3.5 years (1 to 8 years), and have an average surface area of 24.2 cm<sup>2</sup> (7.48 to 54 cm<sup>2</sup>), a largest diameter of 8.6 cm on average (2.2 to 18 cm) and an average depth of 0.2 cm. All 3 patients presented with at least two wounds. The surface of the wounds included a maximum of 30% fibrous tissue.

## CLINICAL CASE

74 year-old patient, with insulin-dependent diabetes and who was overweight (112 kg for 162 cm). Bilateral occlusive peripheral arterial disease, transmetatarsal amputation on the left in September 2005, extensive ulceration on the amputation scar for 20 months. Wound measuring 8 x 1.8 cm, depth: 0.2 cm, previous local treatment having failed.

- D0 of treatment with **TLC-NOSF absorbent dressing\*** on 20 June 2007, the wound includes 20% fibrin.
- D+1 week, 27 June, reduction of wound surface area, with epithelialisation in the centre, dividing the wound in two: 4.5 x 0.7 cm and 4 x 2.4 cm.
- D+2 weeks, 4 July, favourable course of healing with reduction in size of both wounds: 4 x 0.5 cm and 2.2 x 1.5 cm.
- D+3 weeks, 11 July, continuation of epithelialisation, with 3 residual lesions measuring 2 x 0.5 cm, 1.2 x 0.7 cm and 1.8 x 1.2 cm
- D+5 weeks, 25 July, treatment with **TLC-NOSF absorbent dressing\*** is stopped, the reduction in wound surface area being 88% and healing progressing well. Treatment continued with a neutral dressing.

**TLC-NOSF absorbent dressing\*** led to a rapid resumption in healing in this wound that had been stagnating for 20 months, measurable from the end of the first week of treatment, and with an 88% reduction in wound surface area in 5 weeks. The dressings were changed twice weekly. The tolerance was very good throughout the duration of treatment.

## RESULTS

In elderly patients with occlusive peripheral arterial disease and overweight in 1/3 of cases, with ulcers progressing for an average of 3.5 years, with a mean surface area of 24.2 cm<sup>2</sup>, the **TLC-NOSF absorbent dressing\*** led to a rapid resumption in the healing process from the first week in 1 case and after 2 to 3 weeks in the other 2 cases. The tolerance was good during treatment. In one case, treatment with **TLC-NOSF absorbent dressing\*** was stopped due to intense pain, but this ulcer remained painful despite a change of dressing (mainly night-time pain related to occlusive peripheral arterial disease). It should be noted that this patient was treated for bilateral ulcers and that the tolerance was good on the other leg. The dressings were changed every 3 days on average.

## CONCLUSION

The new **TLC-NOSF absorbent dressing\***, a metalloproteinase inhibitor, leads to a rapid resumption in the healing process in patients with occlusive peripheral arterial disease, suffering from delayed healing chronic ulcers.



20 / 06 / 2007 D0



20 / 06 / 2007 D0



27 / 06 / 2007 After 1 week of treatment



04 / 07 / 2007 2 weeks of treatment with TLC-NOSF absorbent dressing\*



11 / 07 / 2007 3 weeks of treatment with TLC-NOSF absorbent dressing\*



25 / 07 / 2007 5 weeks of treatment 88% reduction in wound surface area