

# Benefit of the new NOSF absorbent lipido-colloid dressing\* in the management of chronic skin ulcerations with a delayed healing prognosis

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## INTRODUCTION

Numerous factors affect the healing prognosis of a chronic wound, sometimes leading, in practice, to situations in which healing has stopped despite appropriate treatment. For many chronic wounds, the persistence of local anoxia due to ischaemia or in the context of chronic venous insufficiency perpetuates a local inflammatory action that obstructs the triggering of tissue repair. Excessively intense or prolonged production of pro-inflammatory mediators and excessive local proteolysis due to local over-production of matrix metalloproteinases (MMP) represent metabolic disturbances that prevent resumption of the healing mechanism. NOSF (Nano-OligoSaccharide Factor) is an oside substance incorporated in the lipido-colloid interface (TLC-NOSF) of the **new NOSF absorbent lipido-colloid dressing\*** with a demonstrated anti-MMP action.

Here the authors report their experience with this new dressing through two clinical case studies concerning wounds that are difficult due to their aetiology and factors aggravating the healing prognosis.

## CLINICAL CASE STUDY 1

55 year-old female patient, with no notable history other than a phlebological one, with an extensive leg ulcer present for 2 years.

The aggravating factors for her venous insufficiency include work-related ones: prolonged standing and constant shuffling of feet. The patient consulted following a recent enlargement of her ulcer given the absence of appropriate local treatment and associated venous compression.

Her treatment combined the new **NOSF absorbent lipido-colloid dressing\*** under multi-layer phlebological compression.

**The initial examination:** demonstrates very extensive ulceration of the lower third of the lower leg and the right internal malleolar region. The ulcer does not require any prior debridement procedure. A slight network of superficial fibrin allows the base of the ulcer to be seen, revealing granulation that is inadequate to trigger healing. Two epidermal inclusions should be noted in the lower third of the ulcer.



Initial examination



Appearance at D 15



D 30

Appearance of a multitude of bulky fleshy buds while the previously noted epidermal inclusions are extending to form islets. Epidermal flattening at the edges.

Extensive epithelialisation forming a supra-malleolar bridge, already separating the ulcer into two parts.



D 45

Flattening of granulation in the lower third of the leg, gradually invaded by epidermal progression.



D 60

End of healing. Disappearance of distal ulceration and terminal epidermal margination.



D 90

Control: complete, good-quality epithelialisation of this large ulcer affecting the lower third of the lower leg.

## CLINICAL CASE STUDY 2

69 year-old male patient, with polyvascular disease and polyaneurysms. His history includes post-infarction left ventricular insufficiency with a residual ventricular ejection fraction of 22%, a succession of aneurysm dilations on the aorto-iliac vessels having required the insertion of an aorto-iliac stent and the performance of cross-over bypasses.



Post-surgical development of deep necrotic zones, including one in the sacral region treated by surgical excision (opening and debridement), VAC and a **NOSF absorbent lipido-colloid dressing\***



**Result after 8 weeks** under VAC and night-time high-calorie nutrition. Almost total debridement. Granulation incomplete.



VAC therapy continued for 12 weeks and then treatment continued with TLC-NOSF absorbent dressing. Appearance after 3 weeks of **the NOSF absorbent lipido-colloid dressing\***: recovery of level filling tissue and start of peripheral epidermal progression.



**Result after 12 weeks of the NOSF absorbent lipido-colloid dressing\*** Definitive epithelialisation requiring a consolidation phase.

## CONCLUSION

Our two examples illustrate clinical situations in which use of the **new NOSF absorbent lipido-colloid dressing\***, combined with aetiological treatment (leg ulcer in the process of worsening) or combined with controlled wound bed preparation (myocutaneous necrosis) led to a stable, good-quality healing result being obtained.

\* Brand name: The NOSF absorbent lipido-colloid dressing\* is UrgoCell® START (Cellostart) from Laboratoires URGO.