The use of a dermal substitute and thin skin graft in the cure of lower limbs wounds from vasculitis: observational study

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Background
In patients with lower limbs wounds from vasculitis reconstructive surgery with skin grafts can be considered, but this treatment likely fails because of the position, width, and depth of the lesion(s). In these patients a new therapeutic prospect is the use of a dermal matrix that stimulates the production of endogenous collagen before repair with skin graft autografting.

Integra® is a semibiological implant consisting of a two-layered membrane that produces a histo-inductive and histo-conductive action on mesenchyme, leading to the formation of normal derma.

Materials and methods
This observational study enrolled six over 65 years old patients with vasculitis and leg ulcers dating at least 1 years. All ulcers, for a total of 39 lesions, were very
painful. After surgical debridement of the wounds, the dermal matrix was modelled and applied. After 21 days, the attachment of the artificial dermis was tested, the patients were re-admitted for thin skin grafting.

Results
In all patients, at the first follow-up, a notable reduction in pain, exudates and perilesional edema was ascertained. After 2 weeks, progressive substitution of granulation tissue with new yellow gold derma became evident in all the patients. After 21 days, the dermal matrix was completely integrated with the guest tissue. In 5 patients, attachment of the skin graft was complete, and in one patient, it was partial but nevertheless superior for 80% of the surface. Even in this case, complete healing of the lesions was achieved within 4 weeks at most. All patients were checked for a minimum of 6 months, and none suffered an ulcerous recurrence.

Discussion
In our series, Integra® allowed for the complete refilling of the loss of tissue, the rapid disappearance of pain, and the rapid regeneration of a permanent dermis. (Figure 1)

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Reference

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