



VASCULAR DISEASE, VASCULITIS

TOPICAL 0.5% TIMOLOL IN HEALING CHRONIC WOUNDS. AN UPDATE.

G Ettore⁽¹⁾ - L Lospalluti⁽¹⁾ - M Vestita⁽²⁾ - C Fusco⁽¹⁾ - D Bonamonte⁽¹⁾

University Of Bari, Dermatology, Bari, Italy⁽¹⁾ - University Of Bari, Plastic Surgery, Bari, Italy⁽²⁾

Objective: The aim of our observational study was to assess the use of topical timolol 0.5% drops in a large cohort of patients with chronic non-healing wounds.

Materials and methods: We prospectively looked at 100 patients unsuccessfully treated for chronic non-healing wounds at our Unit. All lesions were chronic (at least 3 months) and refractory to standard of care.

Patients sample was stratified according to wounds etiology, patients age, sex and wound duration in weeks. Each patient was treated with topical timolol drops 0.5% (1 drop every 2 cm of wound area/day for 6 weeks), then covered with polyurethane film. Wound size mean, standard deviation (sd) and range at baseline and after 6 weeks of therapy, % of area decrease (compared to baseline) after 6 weeks of therapy and at 6 months follow up were considered. Patient satisfaction was documented with VAS scale.

Results: We documented a statistical significant area reduction in % at 6 weeks (up to 98.9% in mistreated burns) and mean size in every group except diabetic and pressure ulcers. The mean area reduction in % persisted or improved at 6 months in all groups, except diabetic and pressure ulcers. VAS scale documented good patient satisfaction.

Conclusions: Over the last few years we have been studying beta blockers topical applications in medicine, including wound-healing and tumor regression. Timolol has the potential to be an inexpensive and safe to treat chronic ulcers. Timolol gel application greatly reduces pain sensation when compared to the standard of care. However specific dosage and application protocols need to be optimized by further randomized-controlled trials, and cross-analyses.

