

Antimicrobial and antifungal properties of stable ozonides



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INTRODUCTION - The most frequent complications in vulnology are colonization/infection of the lesions, be they pressure ulcers, leg ulcers, diabetic foot lesions or Incontinence Associated Dermatitis. In any case, this complication forces us to establish general antibiotic/antifungal therapies that significantly increase management costs and often create problems for patients. Aim of this work is to demonstrate that Ozoile® can be the ideal solution for managing bacterial and fungal superinfections, avoiding the use of systemic drugs and reducing healing times and management costs.

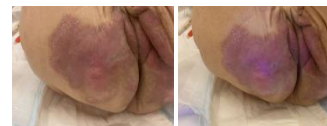
MATERIALS AND METHODS - We have treated more than 100 patients with chronic skin lesions (pressure injuries, venous leg ulcers, diabetic foot lesions, inflammatory ulcers, IAD), with dressing containing Ozoile® (stabled ozonides derived from olive oil)* in oil, cream, gauze and alginate formulations, evaluating the antibacterial/antifungal effectiveness (ABFE) using the Criteria of Cutting & Harding in case of bacterial infection and the Wood's Lamp investigation in case of fungal colonization; we also evaluated the Wound Area Reduction (WAR), using Visitrak System™, or the Healing Time (HT). Observational time 8 weeks.

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RESULTS - All lesions achieved very good results: a significant number of them healed within the observational time (especially IAD and venous leg ulcers). The most significant feature is that bacterial infections have been solved within 2 weeks (mean 11.6 days) and fungal superinfections disappeared within 3 weeks (mean 13.5 days).



IAD (Wood lamp investigation) Beginning of the treatment



IAD (Wood lamp investigation) End of the treatment (2 weeks later)



Inflammatory infectious ulcer Beginning of the treatment 4 weeks later



Venous leg ulcer Beginning of the treatment 4 weeks later

	Pressure Injuries 42 patients	Venous Leg Ulcers 18 patients	Inflammatory Ulcers 14 patients	Diabetic Foot Ulcers 11 patients	IAD Incontinence Associated Dermatitis 23 patients
WAR	80.9%	92.8%	56.9%	78.3%	100.0%
Healed	38.1%	61.1%	21.4%	18.1%	100.0%
ABFE	100.0%	100.0%	100.0%	100.0%	100.0%
Bacteria*	10.2 days	9.8 days	13.3 days	13.1 days	-----
Fungi**	-----	-----	-----	-----	13.5 days

*Time to solve Bacterial infection **Time to solve fungal superinfection

CONCLUSIONS - Ozoile® showed to be significantly effective in the treatment of bacterial and fungal infections in chronic ulcers and not only, because this treatment reduced HT (most of the pressure injuries healed within few week and IAD within 3 weeks) and the management costs: the standard treatment for a IAD lasts more than 130 days and costs about \$185 but the treatment with stable ozonides lasts less than 30 days and costs about \$100.

References:

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