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# **European Wound Management Association** Pure synthetic diosmin and SiO<sub>2</sub>-Ag<sup>+</sup>Chlorex: a real synergy in the treatment of Venous Leg Ulcers



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#### AIM

Beyond the bandage, there's something else to do to accelerate the healing of venous leg ulcers. Our aim is to prove the synergy of Diosmin and SiO<sub>2</sub>-Ag<sup>+</sup>Chlorex in increasing healing rate.

### **METHODS**

We enrolled 40 patients with VLU of less than 6 months, divided into 4 groups of 10 each, in a sequential randomization. GROUP 1: compression therapy over zinc oxyde bandage; GROUP 2: like group 1 plus diosmin<sup>1</sup> (pure synthetic diosmin 900 mg/day); GROUP 3: like group 1 plus medication with SiO<sub>2</sub><sup>-</sup>Ag<sup>+</sup>Chlorex spray powder<sup>2</sup> (silicon dioxide, ionic silver and chlorexidine); GROUP 4: like group 2 plus medication with SiO<sub>2</sub>-Ag<sup>+</sup>Chlorex. Dressing change once a week. We evaluated the reduction of the wound area. The observation lasted 8 weeks. Patients with zinc allergy, neoplastic cachexy, in treatment with immunosuppressive drugs and affected by severe respiratory/cardiac failure have been excluded.

## **RESULTS / DISCUSSION**

All patients had a good area reduction (more than 60%) but there are significant differences between each group. Group 2 had 14.2% of area reduction more than group 1; group 3 achieved about the same result of group 2 (15.7% of area reduction more than group 1); but the most significant result we had is about group 4 with an area reduction of more than 25% in comparison with group 1.

No complications (both local and general), no allergies; every treatment has been well tolerated.

## CONCLUSION

This work demonstrated that pure synthetic diosmin can improve the healing rate in VLU and that there's a real and effective synergy between SiO<sub>2</sub>-Ag<sup>+</sup>Chlorex and diosmin; the most impressive data is that SiO<sub>2</sub>-Ag<sup>+</sup>Chlorex can achieve the same result of diosmin, but there's a very significant improvement if we use both treatments simultaneously.

MEAN AREA REDUCTION				Group 1	Group 2	2 🔳 Grou	ıp3 ∎G	roup 4
Group 1	Group 2	Group 3	Group 4					
62.7%	71.6%	72.5%	78,6%	62	71,6	72,5	78,6	
Control	+ 14.2%	+ 15.7%	+ 25.4%	02, M	ean Area	a Reduc	tion	]

**Group 1: Compression** Group 2: Compression + Diosmin Group 3: Compression + SiO<sub>2</sub>AgChlorex Group 4: Compression + Diosmin + SiO<sub>2</sub>AgChlorex