



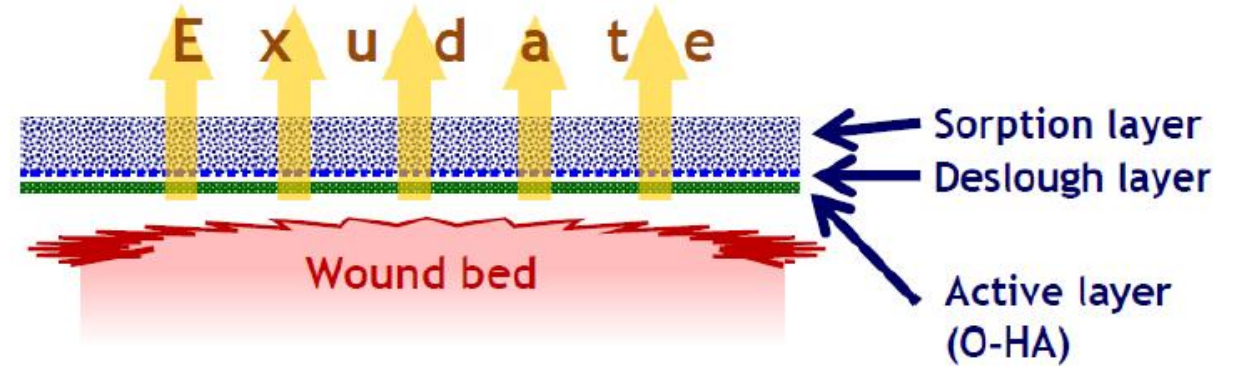
COMBINED SELF-ADHERENT ANTIMICROBIAL WOUND DRESSING IN TREATMENT OF LEG ULCERS

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The positive effect of negative pressure can be partially explained by better drainage of the wound bed. The newly developed wound dressing was designed to combine the drainage effect with hydrophilic and wound healing influence of hyaluronic acid and antimicrobial effect of octenidine.



The aim of present study was to assess the effect of this bandage on healing of venous ulcers on lower extremities.



Active layer - Combination of Hyaluronan & Octenidine - antimicrobial & biological effect

Deslough layer - Removes slough by slight adherence to the wound bed

Deslough layer - Absorbs and leads the excessive exudate out of the wound into a secondary dressing



Methods:

The effect of new hyaluronan-octenidine (HO) wound dressing was studied in 24 subjects with non-healing venous ulcers during 6 weeks period.

The HO dressing was placed directly to the wound bed and then it was covered by several layers of sterile gauze:



The bandage was controlled daily and it was changed when loose adherence to wound was recorded:



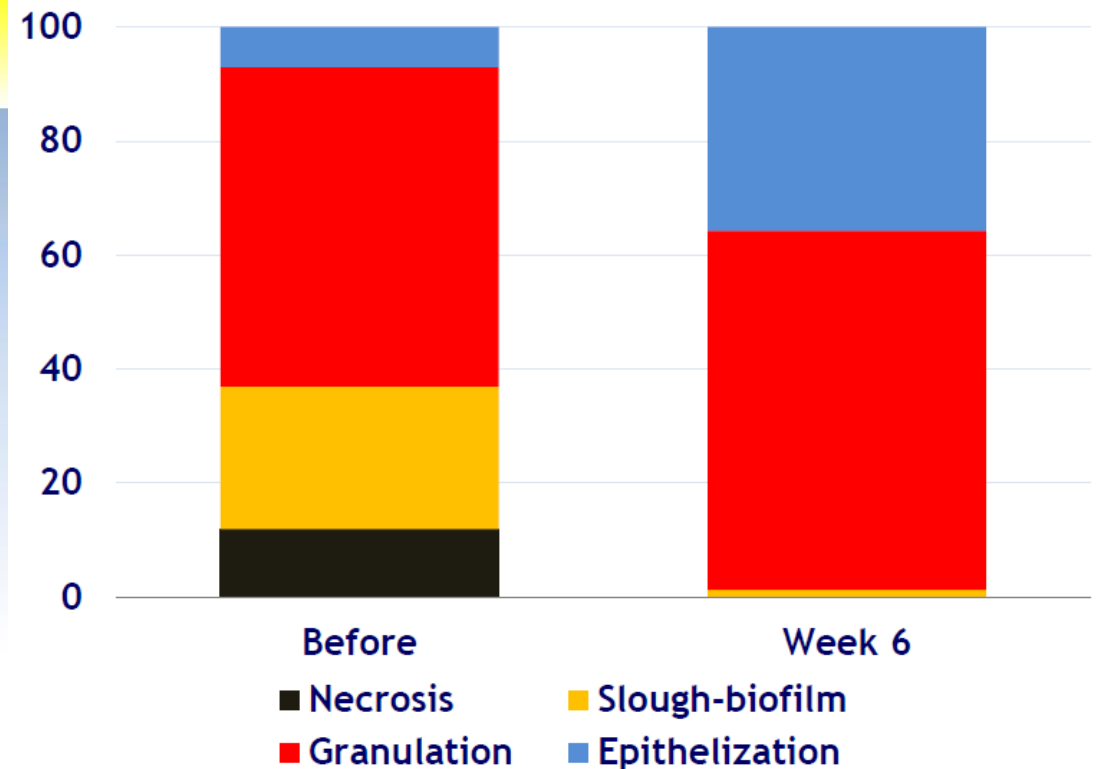
The wound diameter, and characteristics as well as dressing frequency and length of treatment were recorded.

Results:

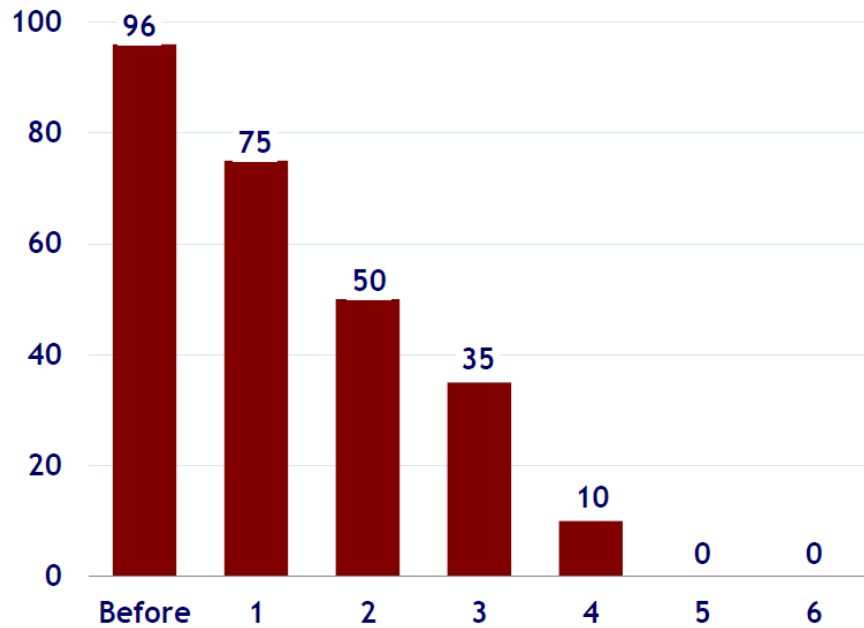
The new HO based wound dressing was changed 2.7 ± 0.5 times per week. It adhered sufficiently to wound bed which was sign of good drainage. Fourteen wounds healed completely before the end of the study period (4.1 ± 0.9 weeks) whereas the area of 10 wounds decreased by $54 \pm 25\%$ and their character improved (improvement of granulation and epithelization):

Completely healed	14	58%
Improved	10	32%
Wound area	Before	Week 6
cm ²	45.3 ± 27.3	21.4 ± 16.3
	47.2%	

Character of the wounds



Clinical indicators of active wound infection decreased in all subjects and no signs of infections were apparent after five weeks:

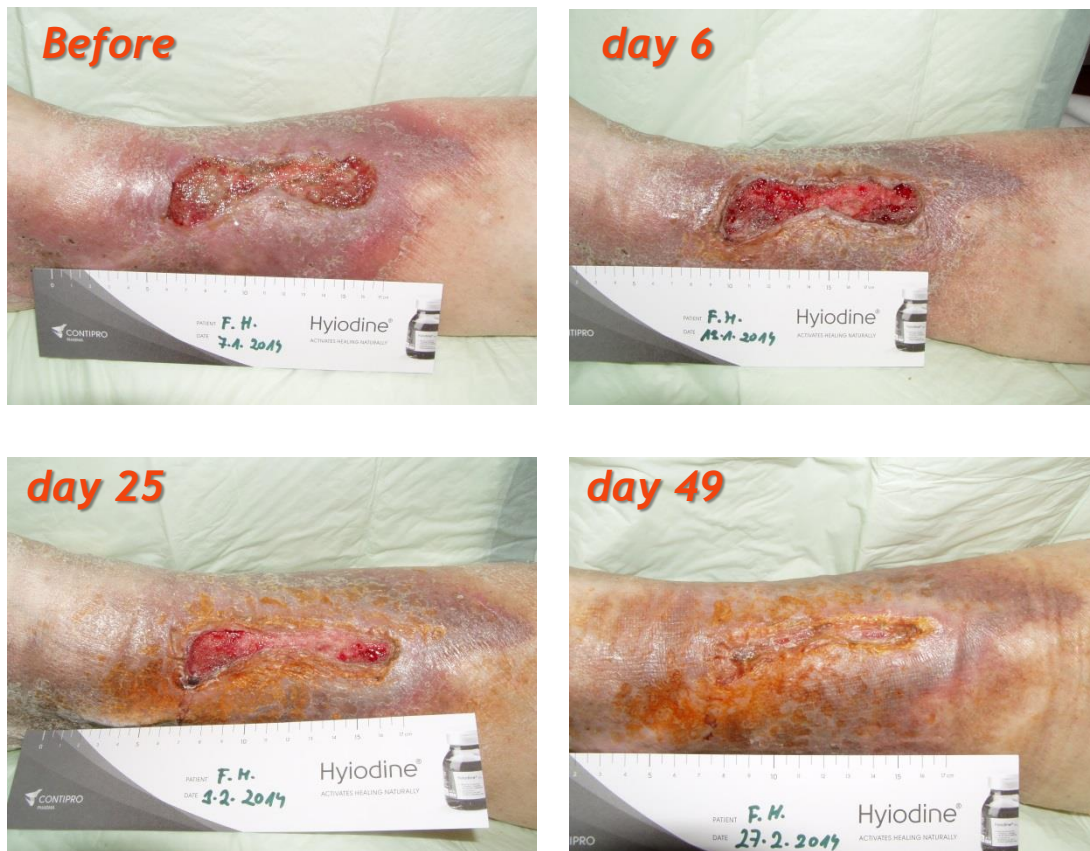


Case report 1:

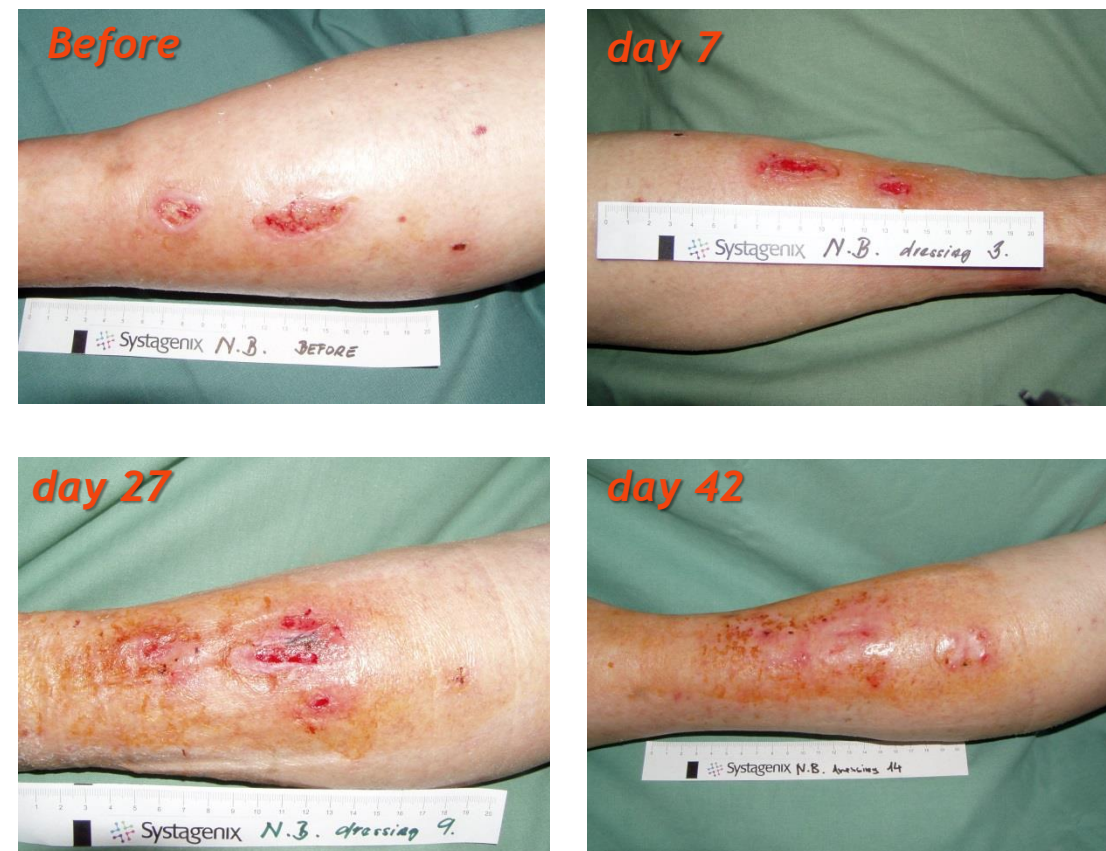


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Case report 2:



Case report 3:



Conclusions:

The new adherent wound dressing based on combination of hyaluronan, octenidine & drainage system is promising method for local treatment of leg ulcers.