

# Effectiveness of Sorbion Sachet S\* in the Treatment of the Highly Exudating Wound

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## Background

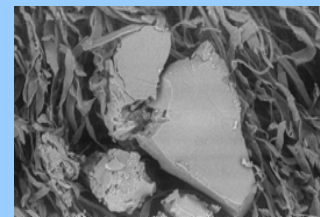
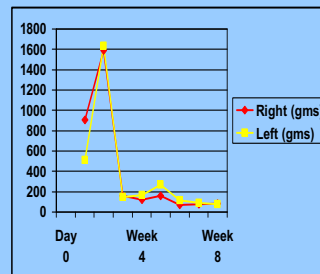
The treatment of the highly exudating wound can be challenging and frustrating. Uncontrolled wound drainage leads to maceration of the skin, prolongation of the inflammatory status of the wound, additional wound breakdown, and delayed healing due to the high level of proteases and inflammatory cytokines in the fluid. Most bandages designed to treat the highly exudating wound are only partially successful because of the limited amount of fluid that can be absorbed and the inability to manage the wound fluid proteases. The inability of the dressings to isolate the absorbed fluid from the wound bed when the dressing is put under pressure is a significant problem. In our attempt to overcome these difficulties in the treatment of highly draining wounds, Sorbion Sachet S\* was evaluated. This highly absorbent wound dressing has been found to absorb large amounts of wound drainage, up to 1600 grams in one of our patient's dressing. The fluid is bound in the dressing so that the fluid is not released back onto the wound bed when the dressing is placed under a compression bandage.<sup>(1)</sup> The product has, also, been found to bind and deactivate proteases in the wound fluid.<sup>(1,2)</sup> The combination of these two actions results in a reduction in peri-wound skin maceration and an improvement in wound healing.

- 1) Chadwick P. The use of Sorbion Sachet S in the treatment of a highly exuding diabetic foot wound. *The Diabetic Foot Journal* 2008;11(4):183-185
- 2) Cutting KF, White RJ. Maceration of the Skin and Wound Bed: Its Nature and Causes. *Journal Wound Care* 2002;11:275-278
- 3) Sharp CA, Cutting KF. Hydration Response Technology—The Concept Explained. A Position Paper. In Press, 2010
- 4) Romanelli M, Dini V, Bertone M. A Pilot Study Evaluating the Wound and Skin Care Performances of the Hydration Response Technology Dressing: A New Concept of Debridement. *Journal Wound Technology* 2009;5:1-3
- 5) Cutting KF, et al. Biofilms and Significance to Wound Healing. In Eds: SL Percival and KF Cutting. *The Microbiology of Wounds*. CRC Press, Boca Raton, FL. 2010
- 6) Lee KS, Maloney BS, Hermans MHE. Sorbion Sachet S in Wound Bed Preparation: Clinical Results of a 10-Patient Evaluation. Available from Sorbion Aktiengesellschaft, Ostbevern, Germany

\*Sorbion Sachet S – Product of Sorbion AG, Ostbevern, Germany

## Control of Drainage with Sorbion Sachet S

44 y/o lady with large, bilateral venous ulcers with massive drainage. Sorbion Sachet was able to absorb large volumes of fluid and keep it away from wound bed protecting it and the peri-wound skin. By binding and deactivating proteases in wound fluid,<sup>(1)</sup> the inflammatory reaction was reduced and additional fluid production was minimized.



SEM - gelling agents in sachet S

A 10cm x 20cm sorbion sachet S will comfortably absorb up to 200 ml of fluid in the clinical situation (50% of its physical capacity). The cellulose fibers on the surface of the dressing maintain the moist wound environment while wicking the excess moisture to the underlying gelling agents which trap and maintain the fluid.<sup>(3,6)</sup>

## Properties of an Exudate Management System

1. Retain large amounts of fluid
2. Inactivate proteases and inflammatory cytokines to protect the wound bed matrix and peri-wound tissue
3. Maintain a moist wound environment
4. Enhance autolytic debridement
5. Isolate surface bacteria away from the wound bed to lower bacterial bioburden

Adapted from Sharp and Cutting<sup>(3)</sup>

66 y/o lady with chronic venous insufficiency, swelling of the leg, and ulcerations to foot and toes. Healing is evident *despite* continued large amounts of drainage. Note drainage trapped in the dressing keeping fluid isolated and away from wound bed facilitating the healing environment.<sup>(3)</sup>



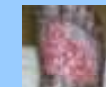
Day 0



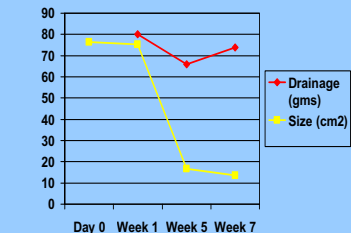
Sorbion



Sorbion



Week 7



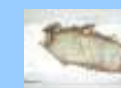
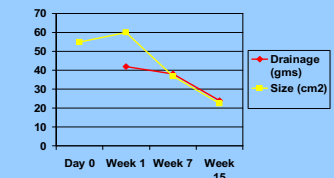
23 y/o lady with a draining venous ulcer. Drainage controlled by Sorbion Sachet S resulting in a decrease in the inflammatory wound environment. Healing occurred as the drainage decreased. Note the control of wound drainage and slough and the enhanced autolytic debridement.



Day 0



Week 15



Debridement with Sorbion sachet S



Day 1



8 Weeks of Sachet S – weekly application

Sachet S facilitates Wound Bed Preparation including autolytic debridement, reduction in inflammation and reduction in drainage levels. It shows potential for reducing biofilm.<sup>(1,4,5)</sup> These findings combine with beneficial impact on overall cost, wound healing progress and patient quality of life.