FIRST RESULTS OF NOVEL ANTIMICROBIAL FOAM DRESSING IN PRACTICE

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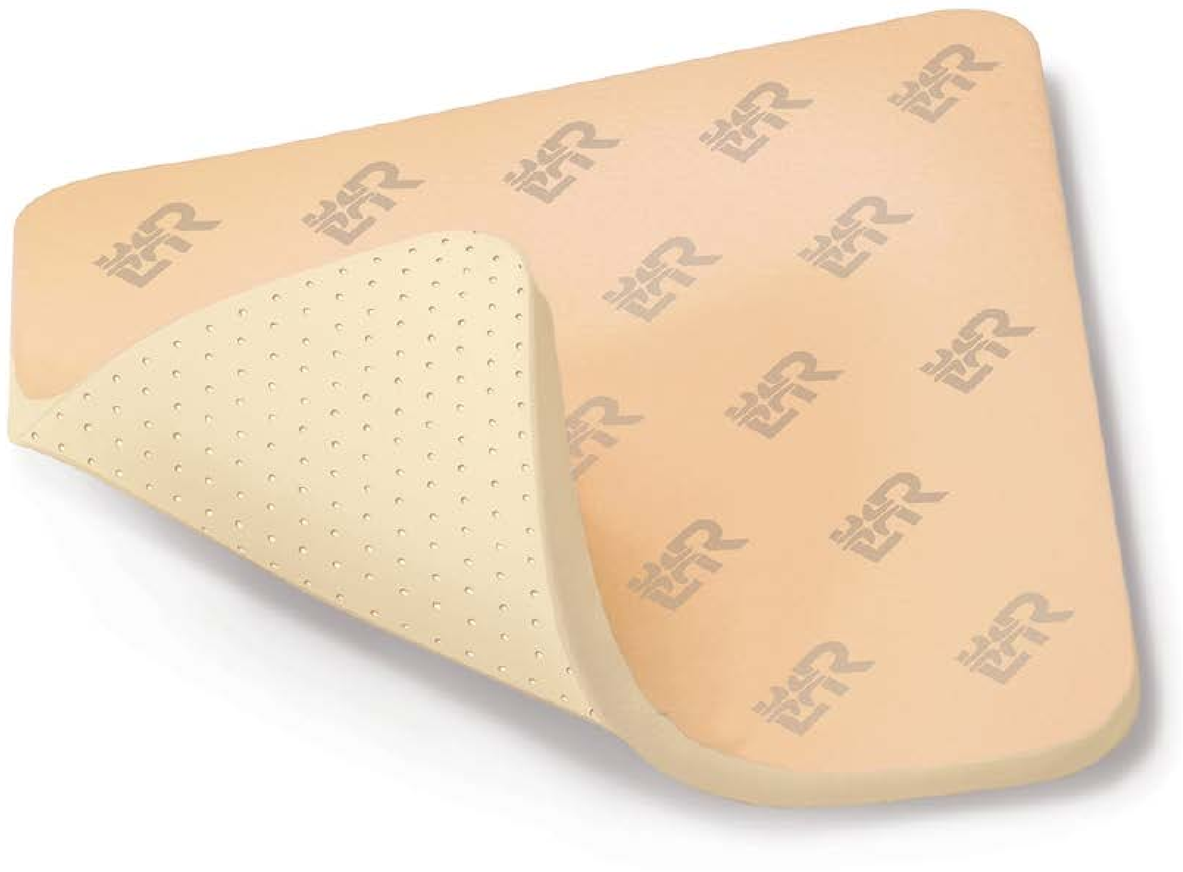

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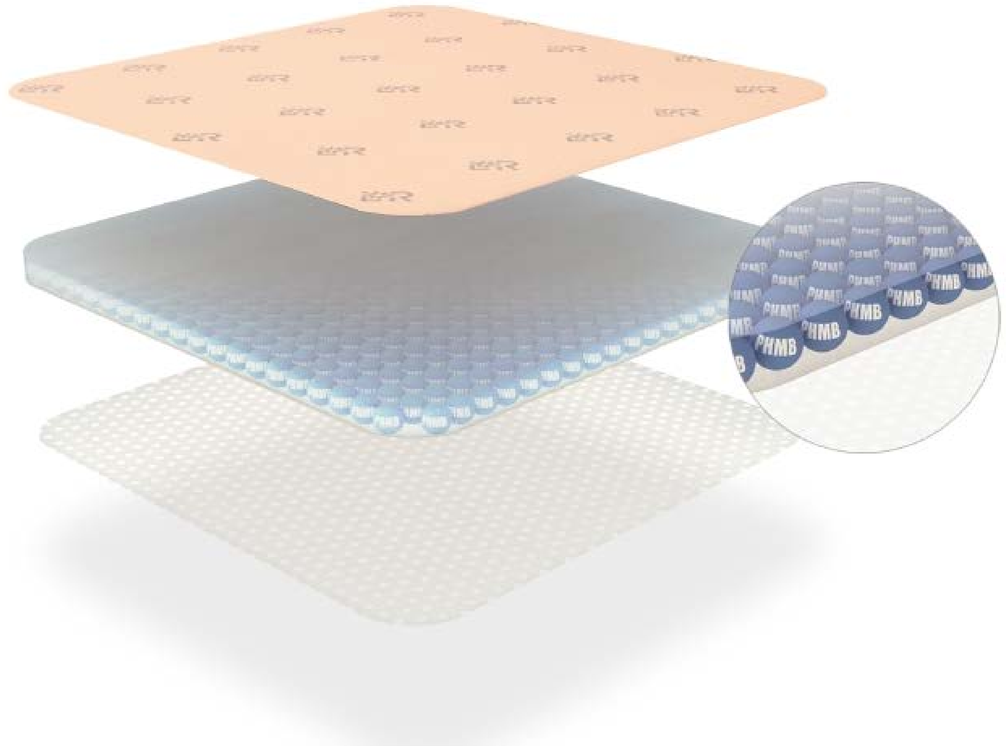
Aim

A novel antimicrobial foam dressing with PHMB[1] for the treatment of moderate to severe exuding chronic and acute wounds, that are infected or at risk, had been marketed and first results in patients should be evaluated. Therefore a case series was initiated to get experience in the treatment of leg ulcer, pressure ulcer or other chronic wounds.

Methods

The non-adhesive antimicrobial foam used is made of a hydrophilic PU-foam with waterproof PU film at the backside which functions as a barrier against bacteria and a wound contact layer preventing from traumas while removal of the wound dressing. The perforation of the wound contact layer will allow the absorption of exudate and reduces the risk of maceration of the healthy skin. In addition the foam contains the antimicrobial substance polyhexamethylene biguanide (PHMB, polihexanide), which kills and inhibits growth of microbial. The PHMB, released in the presence of wound exudate for up to 7 days, based on in vitro tests, is effective against a wide spectrum of germs that are often found in bacterial colonization and infection of wounds.



The case series was started in wound centers in Germany and the users were advised to use the antimicrobial foam* according to the instruction of use in patients with infected wounds or wounds at risk until the signs of infection disappeared.
The wounds were evaluated according to wound size and status by the investigator and photographs were taken.

[1] Suprasorb P + PHMB, distributed by Lohmann & Rauscher International GmbH & Co. KG;

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RESULTS

Exemplary 2 patients with leg ulcer respectively pressure ulcer were treated with the novel wound dressing confirming the benefit in the treatment of chronic wounds.

CASE 1

The first case is about a male 59 years old patient suffering from leg ulcer. Initial wound size was 56 cm^2. The leg ulcer wound (> 3 months) was covered by fibrinous tissue, exudate was moderate and no significant odor was present. Wound surrounding skin appeared dry, scaly, edematous and covered by hyperkeratosis.
Due to signs of infection (redness of wound ground and wound surrounding skin, edema) therapy was changed from standard foam dressing to the novel antimicrobial foam[1].

Picture 1: Initial wound

Picture 2: after 1,5 months

Picture 3: after 2,5 months

The wound was debrided with monofilament fibre debrider[2], wound rinsing solution was used before application of hydrofibre[3] as primary dressing and the antimicrobial foam[1] as secondary dressing fixed by elastic gauze bandage[4]. Compression was applied using a short stretch bandage[5]. Dressing change was done every third day.

After three weeks treatment with the antimicrobial foam granulation started. After 2,5 months the therapy could be discontinued due to start of epithelisation. Wound size had been reduced from 56 cm^2 to 28 cm^2. The products used were very well tolerated and no side effects appear.

[1] Suprasorb P + PHMB, distributed by Lohmann & Rauscher International GmbH & Co. KG;
[2] Debrisoft, [3]Suprasorb Liquacel, [4]Mollelast, [5]Rosidal K, Lohmann & Rauscher International GmbH & Co. KG

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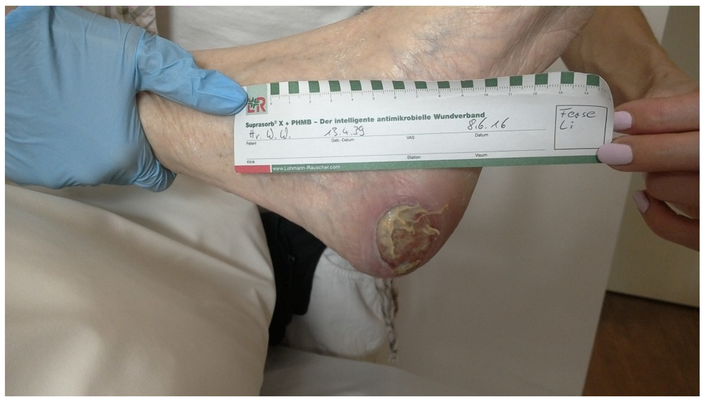
CASE 2

The second case was a 78 year old male patient suffering from a pressure ulcer at the heel. The heel was padded and continuously off-loading was prescribed.

After three months the wound started to develop purulent fibrinous tissue accompanied by bad smell. At this time the pressure ulcer heel wound had the size of 3x3x2cm. The therapy was changed and the wound was treated with the antimicrobial foam[1] after wound irrigation and debridement with monofilament debrider[2]. Dressing change was performed every three days. After another 3 months epithelisation started and treatment was stopped.

Picture 1: Initial wound



Picture 2: after 3 months, start of antimikrobial foam

Picture 3: after 6 months

CONCLUSIONS

The novel antimicrobial foam[1] showed benefit in the treatment of infected chronic wounds or wounds at risk. In both cases the wounds started to heal, the wound surrounding skin improved and the dressing was well tolerated. Further investigations should be initiated to confirm these promising results.

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