HydroBalanced cellulose based wound dressing* with polihexanide used in surgical wounds

Nielsen AM, Fremmelevholm Å

Universitycenter of Wound Healing, Odense University Hospital, Denmark

Introduction:

For years it has been very difficult to solve the problem with a sufficient dressing for patients, who had undergone an operation. When the patient are going to have changed the dressing first time after the operation it is very common that the patients suffer from severe pain. Sometime it is necessary to use general anesthesia to remove the dressing.

<u>Aim</u>

To asses an antimicrobial HydroBalanced biocellulose wound dressing* with polihexanide for surgical use.

The dressing should be able to absorb exudates without being adhesive to the wound-bed. When the dressing is removed following the operation it should be painless for the patient. It must be able to be identified in the wound-bed and should be able to be removed in one piece.

Material and Methods:

16 patients in this observation had either a plantar abscess, a wound with infection, or a partial or total forefoot amputation. When the patients were operated on, the wound-bed was treated with the HydroBalanced biocellulose based dressing* with polihexanide over 24h. The secondary dressing was gauze (one exception with foam). This was the standard treatment for the project. The day after the operation the dressings were changed and registration took place.

Results:

Anamnesis

- § The average age of the patients was 63 years.
- § The gender ratio was 14/2 (men/women).
- § 80 % of the patients had diabetes.
- § Types of operations: 8 amputations, 3 abscesses, 5 wounds with infection (3 of these had osteomyelitis.)

Pain levels (fig 1)

were rated by the patient when the dressing was removed:

§ no pain:
§ mild pain:
§ moderate pain.
§ severe pain:
§ unbearable pain:
0 patients.

Antibiotic treatment: Yes/No: 14/2

Adherence to the wound bed: Yes/No: 1/15 patient with adherence: the secondary dressing was a foam.

Exudate in the wound-bed: Yes/No: 0/16

Maceration on the surrounding skin of the wound:

Yes/No: 2/14

Identification of the dressing in the wound bed:

Yes/No: 15/0 (1 registration is missing)

Discussion and Conclusion:

This pilot study shows that the dressing has good control of exudates without macerating the skin surrounding the wound. It is a non-adhesive dressing, which is easy to identify and remove with no remains deposited in the wound. When the dressing was changed 13 patients were painless, 2 patients had mild pain and 1 patient only had moderate pain. The dressing is easy to handle and well tolerated by the patients, who almost were painless when the dressing was removed.

Case 1: Female Diabetes for 2 years Ulcer duration: 1½ year

There were 3 ulcers at the heel with contact to the bone X-ray of calcaneus:
Osteomyelitis





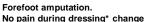




Case 2:

Male
Diabetes which affect the kidneys
Severe arteriosclerosis
2. and 3. toe is amputated
Now severe infection in the forefoot and osteomyelitis





with infection along the tendons



Some months after amputation.

<u>Case 3:</u>

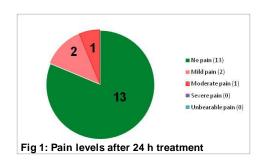
Male
Praeder Willis syndrom
Diabetes
Pressure ulcer complicated



Osteomyelitis and infection along the tendons.
No pain during dressing* change



Some months after operation.



^{*} Suprasorb® X+PHMB, Lohmann & Rauscher