The treatment of infected wounds of older patients with a silver alginate

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Introduction

To determine, the effectiveness of silver alginate with infected pressure ulcers. .

Methods

A case study of 20 patients with infected (with primary and/or secondary symptoms) pressure ulcers determined a clinical view. The data have been collected once a week in a postulated document and supported with digital photographs. The wounds were treated 1 to 3 times a week with silver alginate and covered with a secondary bandage; permutation of the bandage depends on exudation and urine and /or faeces loss.

Results

11 pressure ulcers wounds on the heel and 9 pressure ulcers on the coccyx (N=20). After 3 weeks the infection on the coccyx was gone but usage of silver alginate was continued for 2 weeks more because of urine and/or faeces loss. After 2 weeks the infection on the heel was gone.

Discussion

Nutritionist was consulted for hydration and nutrition. Pressure relief matrasses and pillows, were used and applied. Patients and caretakers were informed and trained on how to apply the treatment.

Conclusion

The alginate with silver is very effective to restore the bacterial balance. In two and a halve weeks on average the infection is gone and the woundhealing can continue. The alginate had a good fluidhandling and created a moist enviorement. It's easy to apply and change. Attention for identifying woundinfection, this is difficult for not experienced nurses

Case 1

Introduction

Patient, 85 years, recordings from a hospital after operation femur #, in all around bad condition, nutrition/ fluid intake. Patient is incontinent with urine and defecation.
With recordings 19/06/08 manifestation of grade 3 pressure ulcer of the sacrum due to pressure and friction forces. Wound surface 9,5 x 7 x 3 cm, cavity to back 1,5 cm.
An infected wound with medium amount of exudate, pus , odor, pain.
Wound edges red, surrounding skin of wound irritated, redness, small pus heads.

Use of dietician additional nutrition.

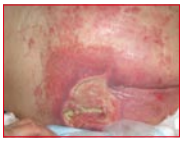
Use of AD-materials

Repose mattress and Repose wedge pillow in bed, every 4 hours repositioning and heels pressure free. Allevyn heels with terry toweling socks

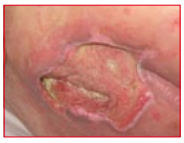
Wound treatment

Before dressing change rinse wound in the shower with tepid tap water (let tap water run for 30 seconds before use).
Wound edges with Cavilon Cream.
On/in the sacrum: Suprasorb A-Ag (silveralginate) Cover with: absorbing dressing Fixate with: Suprasorb F
Dressing change when saturated or when dressing has become dirty due to urine and/or defecation.
The red skin around the wound is treated with Miconazol cream, zinc-ointment patted into this.

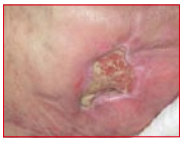
Start treatment: 19/06/08



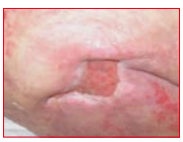
Wound surface:
9½ x 7 x 3 cm, cavity to back 1½ cm.
An infected wound with medium amount of exudate, pus , odor, pain.
Dressing change twice a day, also due to incontinence urine/defecation.



2½ week later infection is gone, skin irritation diminished. Wound surface: 9 x 7 x 2 cm, cavity to back 1 cm
Medium amount of exudate. Dressing change once a day
New granulation tissue can be seen in the woundbed
On the wound use of Suprasorb A-Ag, absorbing dressing.



7 weeks later fibrin fur present with new granulation tissue
Wound surface:
5 x 4 x 1 cm, cavity no longer present
Medium amount of exudate.
Dressing change three times a week.
On the wound use of Suprasorb A-Ag, absorbing dressing, also due to incontinence urine/defecation.



11 weeks later fibrin fur has disappeared.
Wound surface:
3 x 3 x 0.3 cm
On the wound use of Suprasorb A, Suprasorb P and Suprasorb F
Dressing change twice a week. Wound is closed on 3rd of september 08

Case 2

Introduction

Patient 91 years old, rushed to the Nursing home from a home for the elderly, where patient has fallen and sustained a fracture to the pubic bone. Patient is immobile confined to bed due to pubic bone fracture and pain. Furthermore the patient is incontinent with urine and runny defecation. Because the patient lay in bed for days on end in the Nursing home, immobile and without AD-materials, the patient sustained a grade 4 pressure ulcer on the sacrum and a grade 3 pressure ulcer on the heels. With recordings on 04/01/08, sequestrotomy applied, sacrum wound surface: 15 x 10 x 4 cm.
Wound bed color : 40% red and 60% yellow.
Wound edges not softened.
Wound treatment until 09/01/08 with use of Eusol three times a day, wound edges protected with Cavilon cream, covered with absorbing dressing. Because of the seriousness of the pressure ulcer on the sacrum, a CAD is placed there.
Use of medication for the pain: Oxycontin 5 mg twice a day.

Use of dietician additional nutritions.

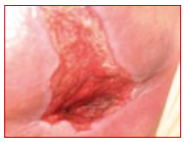
Use of AD-materials

Alternating mattress, Repose wedge pillow in bed (where heels are kept clear of the mattress), repositioning every 4 hours, but not on the sacrum, pillow placed between the knees when in side position and pillow on the mattress which supports the lower leg from just below the knee until just above the ankle which prevents pressure on the ankle and the side of the foot. Allevyn heels with terry toweling socks.

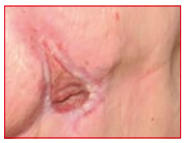
Wound treatment

Before dressing change, rinse the wound with a 60cc syringe with tepid tap water (run tap water for 30 seconds before use).
Wound edges with Cavilon cream.
On/in the sacrum: Suprasorb A-Ag (silveralginate) filled out with a gauze. Covered with: absorbing dressing. Fixate with: Suprasorb F.
Dressing change when saturated or when dressing has become dirty due to runny defecation.

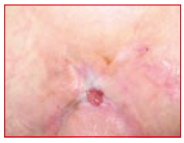
Start treatment: 09/01/08



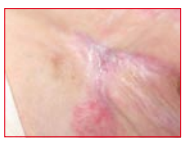
Wound surface: 15 x 10 x 4 cm
Choice of Suprasorb A-Ag (silveralginate) because of defecation running into the wound, which presents the risk of an infection or possibly a sepsis.
Covered with absorbing dressing, dressing change three times a day also due to defecation and exudate.



7 weeks later:
Wound surface: 5½ x 3 x 1 cm
Woundbed colour:
10% yellow, 90% red.
Still use of Suprasorb A-Ag (silveralginate). Covered with Suprasorb P 15 x 15 cm in diamond shape applied to sacrum.
Edges fixated extra with Suprasorb F.
Dressing change 3 times a week.



17 weeks later:
Wound surface: 1 x 1 cm
From the 12th week change to Suprasorb A.
Covered with Suprasorb P 7½ x 7½ cm in diamond shape applied to sacrum. Edges fixated extra with Suprasorb F.
Dressing change twice a week.



Wound closed on the 18th of june 2008

Case 3

Introduction

82 year old psychiatric patient, pneumonia, high fever, poor nutrition and fluid intake.
Left buttock development of grade 3 pressure ulcer in one week's time.
Patient is incontinent with urine and runny defecation as a possible result of antibiotics.

Use of dietician additional nutrition/fluid

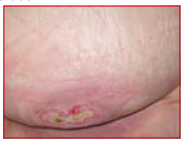
Use of AD-materials

Alternating mattress and Repose wedge pillow in bed, repositioning every 4 hours (not on sacrum, only left/ right repositioning) and heels pressure free

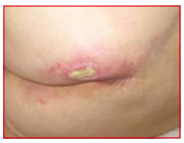
Wound treatment

Before the dressing change, rinse the wound 4 times through a 60 cc syringe with tepid tap water (run tap water for 30 seconds before use) until the water is clear and the wound (edges) are clean.
Use of Cavilon spray on wound edges as protection against maceration of the wound edges.
On the sacrum: Suprasorb A-Ag (Silveralginate), this is chosen because the excrement frequently gets in wound and does not speed up healing but rather slows it down.
Cover with: Suprasorb P 7½ x 7½ cm, cut in half, fixate edges extra with Suprasorb F. A whole Suprasorb P 7½ x 7½ cm did not stay in position well and this solution worked fine. Dressing change when saturated or when dressing has become dirty due to urine and/or defecation which got underneath the dressing.
The red skin around the wound and the buttocks is treated with Cavilon spray. This protects against the effect of the urine/defecation, but also improves the adhesive power of the Suprasorb P and Suprasorb F.
Dressing change once to 3 times a week. This is due to incontinence.

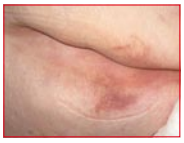
Start treatment: 08/07/08



Wound surface:
Woundbed, yellow necrotic tissue.
Infected wound with medium amount of exudates, odor present.
Dressing change 3 times a week. On the wound use of Suprasorb A-Ag.



2 weeks later:
Wound surface:
3½ x 1½ x 1 cm
Woundbed, 90% yellow necrotic tissue and 10% new granulation tissue on the wound edges.
Medium amount of exudates, odor not present. Dressing change 3 times a week. On the wound use of Suprasorb A-Ag.



After 6 weeks:
Wound surface:
1 x 1 cm
Woundbed red
Change to Suprasorb A. Little amount of exudates covered with Suprasorb F.
9 weeks later: After manifestation of the wound, the wound has now healed.

Case 4

Introduction

Patient 89 years old, diabetic type 2, has kidney issues, is bedridden, has been taken from the nursing home to hospital due to kidney inefficiency.
When transferring back to the nursing home the patient is in all around bad condition and has pressure and friction forces injuries on the buttocks.
Wound surface right buttock: 11 x 7 cm, left buttock: 4 x 2½ cm, shallow wound, not infected, medium amount of exudate, pain.
Woundbed purple/brown/red.
Patient is incontinent with defecation, has a CAD. Patient does not have a regular defecation pattern, loses small bits of defecation during the entire day, cannot be treated for this.

Use of dietician additional nutrition/fluids.

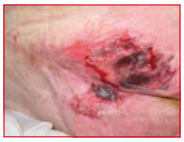
Use of AD-materials

Alternating mattress and Repose wedge pillow in bed, patient has had a grade 3 pressure ulcer on the heels before. Heels kept pressure free.

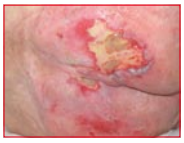
Wound treatment

Before dressing change, rinse the wound. This is unfortunately not possible in the shower, so it is done with a 60cc syringe with tepid tap water (run tap water for 30 seconds before use).
Skin around the wound is protected with cavilon spray.
1st dressing choice: Suprasorb A on the open wounds on the buttocks. Covered with Suprasorb F. Dressing change when Alginate starts to form a gel or when defecation gets underneath the dressing. When removing Suprasorb F, first some water is placed behind the foil causing it to loosen by itself and does not cause skin damage.

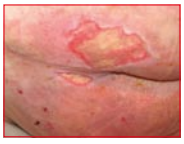
Start treatment: 14/10/08



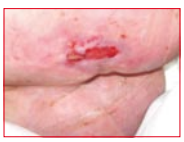
Wound surface: right buttock: 11 x 7 cm, left buttock: 4 x 2½ cm, shallow wound, not infected medium amount of exudate, pain. Skin around the wound and where Suprasorb F is placed, is protected with Cavilon spray. Choice: Suprasorb A around the small open wounds on the buttocks. Covered with Suprasorb F. dressing change when Alginate forms a gel or when defecation gets underneath the dressing.



6 days later:
The wound still got infected, also due to defecation and weakened condition.
The Suprasorb A is replaced with Suprasorb A-Ag with result, the treatment otherwise stays the same.
Dressing change every other day.



5 weeks later: fibrin fur still present with new granulation tissue.
Wound surface: 7 x 4 cm. Skin around the wound is protected with Cavilon Spray. Suprasorb A-Ag used on the small open wounds on the buttocks. Covered with Suprasorb F.
Medium amount of exudate.
Dressing change: three to four times a week. Choice to keep using Suprasorb A-Ag is because of incontinence with defecation. The healing process is going well.



10 weeks later: fibrin fur has disappeared. Nice new red granulation tissue. Wound surface: 3 x 2 cm
Cavilon spray, Suprasorb A and Suprasorb F now used on the wound, dressing change twice a week when no defecation gets underneath the Suprasorb F.
Wound closed on the 28th of February 2009.

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