

# The use of Algivon® dressing on the treatment of a 57 year old grossly obese male with chronic lymphoedema and recurrent cellulitis

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**Manuka honey has recognised antibacterial properties, has an osmotic effect drawing fluid from the wound bed, promoting autolytic debridement and inhibiting bacterial growth.**

Honey is rich in water soluble anti oxidants and provides favourable conditions that promote granulation and epithelialisation and has been found to have a rapid action in the reduction and elimination of odours.

## The dressing

Algivon® is an absorbent, sterile, non – adherent contact dressing comprising calcium alginate mechanically bonded fibres impregnated with Medical Grade Manuka honey. When in contact with wound exudate the calcium alginate fibres swell and form a sodium calcium gel. The exudate, honey and alginate form a honey gel which has been demonstrated to prolong the retention of honey at a wound site.

Algivon® is indicated for use in the treatment of all wound types but especially sloughy, necrotic and malodorous wounds including leg ulcers, pressure sores, fungating lesions, complicated surgical wounds and abrasions.

Algivon® is placed directly onto the wound bed and covered with a secondary dressing appropriate to manage exudate levels.

## Chronic Lymphoedema linked to gross obesity

Lymphoedema is a progressive, incurable condition. It occurs as a result of the accumulation of fluid, proteins and waste products in the tissue spaces due to an imbalance between interstitial fluid production and transport. Lymphoedema due to gross obesity is known as secondary or acquired lymphoedema.

## Case study

The patient is a 57 year old male, who is grossly obese (BMI 62.5). He has stage 3 chronic lymphoedema and cellulitis resulting in sepsis. He also has Grade 3 pressure damage to his left thigh, both buttocks and both heels.

## Medical history

The patient has had frequent previous hospital admissions with shortness of breath, congestive cardiac failure, atrial fibrillation,

chronic lymphoedema and recurrent cellulitis. Admitted by GP due to physical deterioration, inability to get up from chair, further episode of cellulitis.

## Initial Tissue Viability assessment

The patient presented with stage 3 lymphoedema to the waist - densely fibrotic hard tissue, pitting absent, thickened skin, hyperpigmentation and deep skin folds noted.

Grade 4 pressure ulcers to both heels - left heel 10cm x 6cm dry eschar, right heel 2cm x 2cm also necrotic. Left lower leg cellulitic, macerated, excessive malodorous exudate with extensive skin loss. Left thigh and both buttocks had extensive grade 3 pressure damage extending from just above the patient's knee to his buttock. Wound beds dry "leathery" eschar firmly adhered and surrounding skin macerated and excoriated.



## Wound care plan

All wounds cleansed with saline and Algivon® dressing applied to areas of grade 3 pressure ulceration and to exuding, cellulitic lower leg. Algivon® was selected to encourage autolytic debridement, provide an anti microbial environment (staphylococcus aureus and group G streptococcus identified on wound swab and in blood cultures), stimulate granulation and to improve malodour.

The dressing was easy to apply and did not adhere to fragile, friable tissue.

Eclipse® Adherent dressings were then applied as they are highly absorbent and have a high capacity for wound exudate management.

The layer of absorbent crystals protects the skin from further damage due to maceration. All dressings were secured in place by tubular bandage. Initially, the dressings were changed up to three times a day due to excessive volumes of exudate. This was reduced to daily as exudate decreased.

The patient was nursed on a Bariatric bed and high risk pressure relieving mattress suitable for his weight.

## After four weeks

Both heel ulcers were fully debrided and showing healthy granulation tissue, the surrounding skin remained slightly macerated due to excessive exudate which had proved difficult to manage. The dressing regime of Algivon® and Eclipse® Adherent continued.

Wounds to the back of the patient's thigh were also fully debrided, all dry eschar had been removed and wound beds were filled with healthy granulation tissue and epithelialising tissue.



The pressure ulcers to the patient's buttocks were slower to debride than other areas but was eventually achieved with the continued application of Algivon® after six weeks.

The patient remained in hospital for a total of six weeks. During this time he came under the care of many members of the multi disciplinary team - Vascular surgeon, Consultant Microbiologist and Cardiologists. With specialist input from the Dietetics team, who devised a high protein/ low calorie diet, the patient lost a significant amount of weight. Intensive physiotherapy improved his mobility and the Occupational Therapy team

improved his accommodation and social circumstances. The patient was discharged to the District Nurses.