Management of epidermolysis bullosa (EB) skin lesions with a non-adherent dressing, Urgotul®

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Abstract

Epidermolysis bullosa (EB) is defined as a rare group of inherited skin disorders involving blistering of the skin and sometimes mucous membranes. It is characterised by recurrent, chronic and painful skin lesions. The local management of lesions attempts to reduce the frequency of skin breakdown, reduce the size of the chronic wounds and minimalise pain. This requires a non-adhesive and non-adherent dressing to prevent pain and bleeding on removal [1].

The aim of this small case study was to assess the efficacy of the primary dressing Urgotul® in two patients suffering from non-Herlitz EB. The treatment was initiated on a primary visit by the clinical nurse consultant, and was then monitored for a maximum of 8 weeks. Assessment was based on the level of pain associated with the dressing change, ease of applying and removing the dressing, bleeding, trauma, adherence of the dressing to the wound and the effect on wound healing. The findings show that Urgotul® is an effective primary dressing for the treatment of EB wounds, demonstrating pain free removal and improved wound healing.

Introduction

In accordance with recent new classifications of the disease, there are four major epidermolysis bullosa (EB) types – EB simplex (EBS), junctional EB (JEB), dystrophic EB (DEB) and Kindler Syndrome [2]. Approximately 1000 patients suffer from EB in Australia [Dystrophic Epidermolysis Bullosa Research Association Australia – DebRAA 2002]. Sufferers require specialised management throughout life as some types of EB do not only affect the skin but also the internal mucous membranes. The disease can therefore cause a wide range of complications – gastrointestinal, musculoskeletal, ophthalmological, respiratory and genitourinary. This pathology has important implications on the psychological, physical and social wellbeing of the child and the family. Good wound care is an essential part of the management of EB, but no single approach to managing wound care has proved totally effective [3].

Method

There are a wide variety of primary wound dressings which are described as non-adherent and effective in promoting healing; these dressings are constantly evolving. Dressings provide a barrier between the patient and the environment, help prevent infection, support wound healing and relieve pain.

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Urgotul® is a non-occlusive hydrocolloid dressing made of a non-woven polyester mesh impregnated with hydrocolloid particles dispersed in a petroleum jelly matrix. Essentially, Urgotul® is an impregnated aerated net, which is non-greasy to the touch, thin and pliable. Urgotul®, it is claimed, can be indicated for use in superficial burns, traumatic wounds, leg ulcers, pressure sores, wounds in stages of granulation and epithelialisation and EB wounds. When the dressing comes into contact with wound exudate, the hydrocolloid particles form a gel and, together with the petroleum jelly, form a lipido-colloid interface. This apparently prevents adherence to the dressing and enables it to be left insitu for up to 3-5 days.

It is claimed that the dressing is painless and atraumatic and it creates moisture, protection and warmth – all optimal conditions favourable to the wound healing process. The exudate is designed to drain through the fine mesh, to be absorbed by a secondary dressing, preventing maceration. Urgotul® can be left insitu, changing the secondary dressing if strike-through occurs. Being able to leave the primary dressing intact for up to 3-5 days and atraumatic removal are both important factors in dressing choice for EB wounds.

Two patients were included in the evaluation, both diagnosed with non-Herlitz JEB and presenting with chronic skin lesions. The previous primary dressing used by these patients was a silicone-based dressing which sometimes adhered to the wound bed, causing pain and bleeding on removal.

Treatment with Urgotul® as a primary dressing on a pre-chosen lesion was initiated on a home visit by the clinical nurse consultant and its effect monitored using photographic evaluation for a maximum of 8 weeks or until significant wound healing was observed. The secondary dressing of Mepilex Lite® absorbed any exudate. This dressing remained the same during the evaluation. Dressing changes were renewed every 3 days in line with the patients' usual routine. In the absence of systemic symptoms, no temperature or malaise and no localised redness or cellulitis, formal wound swabs were not obtained. Due to the long-standing nature of the wounds, critical colonisation was suspected.

Assessment was based on the level of pain associated with the dressing change, ease of applying and removing the dressing, bleeding, trauma, adherence of the dressing to the wound and wound healing. This case study reports on three cases from these two patients.

Results

Patient 1

This 9-month-old baby had suffered from chronic wounds since birth when he presented with multiple lesions on his legs, feet, arms and fingers. The baby weighed 8kg (25th percentile), with a height of 70.6cm (50th percentile). Serial measurements indicated that the baby's growth was adequate. His mother was puréeing soft foods as retching and vomiting occurred with any solid or fibrous food. He was on no background pain relief other than PRN paracetamol, but was given Painstop® before dressing changes.

He presented on the initial home visit with a lesion on the dorsum of the left hand. This extended from the wrist to the knuckle joint (Figure 1). This wound had been present since birth and there had been minimal changes. It appeared beefy red and friable, with granulation tissue present on the wound bed. There was no evidence of healing on the wound edges. There was a light exudate of heamoserous fluid and pain and bleeding on removal of his dressings.

Seven weeks later, after treatment with the Urgotul® dressings, the wound had much reduced in size (Figure 2). There was evidence of wound contracture, the wound no longer appeared friable and there appeared to be some epithelial migration at the wound edges.

The right leg wound (Figure 3) presented as a shiny, moist wound extending from above the knee to the shin. Seven weeks after initiation of the Urgotul® dressing there was significant wound reduction (Figure 4). The baby's mother reported that the new dressing was far easier to remove and apply, with less adherence to both wounds and minimal pain or bleeding on removal.

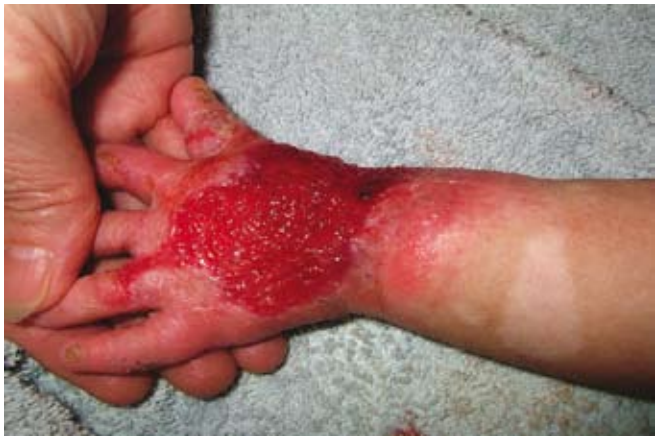

Figure 1. Patient 1: Appearance of hand wound at the beginning of the evaluation (present since birth).

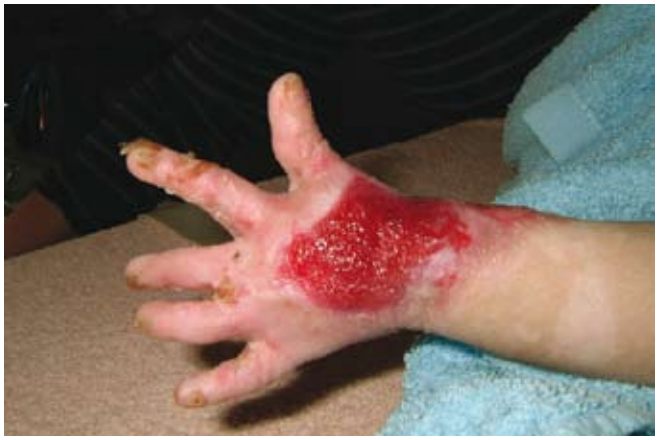

Figure 2. Patient 1: Seven weeks later.

Patient 2

A 14-year-old boy presented with a chronic lesion on his left upper outer thigh (Figure 5), which had begun as a blister 3 years previously. The adolescent weighed 43kg (25th percentile), and measured 160cm (25th percentile). He ate a normal diet and his growth and development were satisfactory. His background pain relief was 200mg Neurontin nocte; he chose not to take any medication at dressing changes. The wound was superficial and dry in appearance, with surrounding scar tissue from recurrent breakdown. After 4 weeks of Urgotul® treatment, significant reduction in the wound was seen (Figure 6). He reported ease of dressing application and removal. The teenager also expressed improved general wellbeing and less pain.

Discussion

This small study demonstrates the effectiveness of Urgotul® as a primary dressing in the treatment of children with EB. It supports previous literature which has also shown that Urgotul® can be removed without adhesion, trauma or bleeding to the wound [4-6]. Decreasing pain and increasing wound healing improves the quality of life for patients with EB and Urgotul® provides further choice for wound management. However, the limitations of this small caseload are acknowledged. Moreover, it is very difficult to assess rates of healing in EB comparatively. Further work is required in this patient group to provide evidence for optimum management.

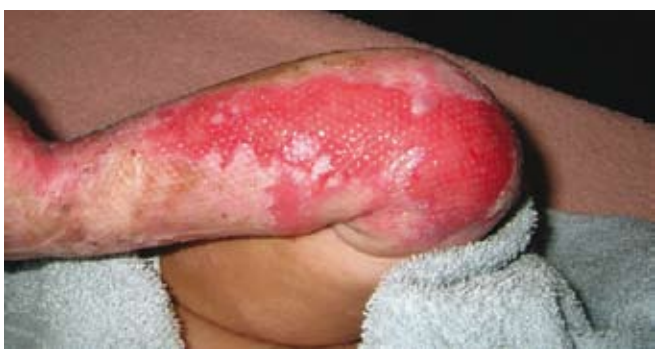

Figure 3. Patient 1: Appearance of chronic leg wound at the start of the evaluation (present since birth).

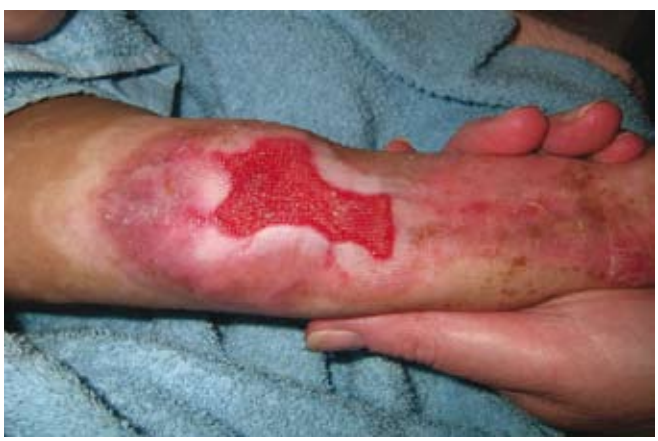

Figure 4. Patient 1: Seven weeks later.

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The author has no connection with the producers of Urgotul® and does not have a conflict of interest.

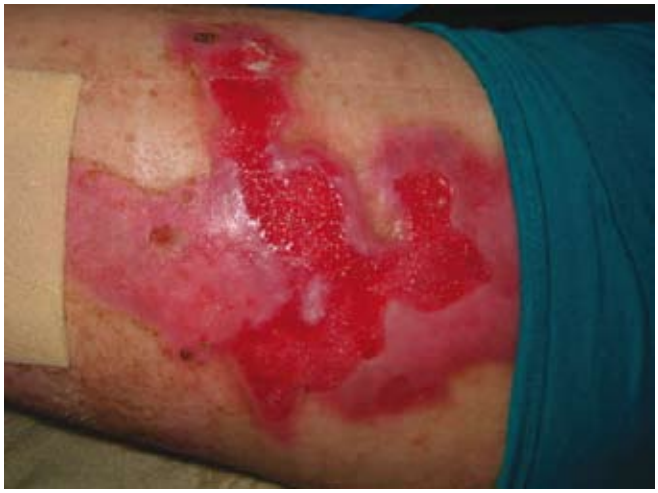

Figure 5. Patient 2: Presentation of chronic thigh wound at the start of the evaluation (present for 3 years).

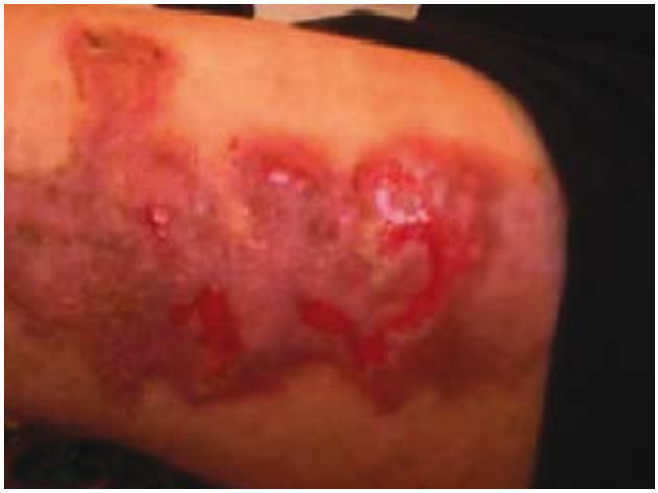

Figure 6. Patient 2: Four weeks later.

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