

EVALUATION OF POLYMEM IN CHRONIC WOUNDS IN TWO CHILEAN PATIENTS WITH EPIDERMOLYSIS BULLOSA (EB)

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INTRODUCTION

Epidermolysis bullosa and bullous (EB) is a group of hereditary diseases, genetically determined and characterized by excessive susceptibility of the skin and mucosa to separate from its underlying tissue after mechanical trauma, causing blistering and open wounds. There are several different forms and subtypes of EB. It is widely acknowledged that those affected with the severe forms of EB have a tendency to develop widespread chronic wounds that are difficult or fail to heal. Those areas of skin affected by repeated breakdown remain very fragile even after healing occurs.

Current treatment for all types of EB is based on symptom management with emphasis on skin and wound therapies, pain relief together with nutritional and psychological support.

The aim of wound management in this group of patients is to protect the skin from further damage while providing an optimal healing environment for those areas that have been damaged. Wound management is complex with a confusing number of different dressing's types available, therefore a suitable dressing choice is paramount. Dressings used should be limited to those that are non-adherent to the wound bed and the fragile peri-wound skin. In our country dressings are not reimbursed so very simple cheap dressings such as vaselin gauze are often used.

AIM

To evaluate the use of PolyMem® in the management of chronic wounds in two of our patients, one with Herlitz Junctional EB and the other with Resessive Dystrophic EB. Factors we looked at were:

- Handling
- Healing
- Pain and pruritus
- Exudate
- Odour
- Quality of life



REDB, 19 years old

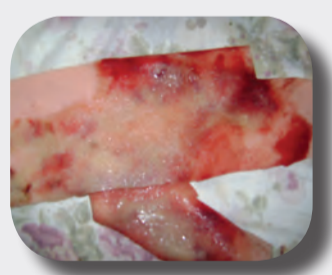
This 19 year old girl is a carrier of Severe Recessive Dystrophic Epidermolysis Bullosa Generalized. She has multiple recalcitrant wounds all over her body. The wound that causes her most despair covers her neck and half her back as well as part of the left cervical and shoulder. This chronic, painful and often hypergranulated wound has been difficult to manage. The wound is often infected which causes the patient even more pain. The neck is an exposed area and due to movement is difficult to dress, this in turn has caused more discomfort and embarrassment for the patient. She often just covers it with a handkerchief whenever she goes out.

Dressing changes and bathing is extremely traumatic causing a lot of anguish and pain. She needs to change her dressings daily or every other day depending on eventual wound infection. She has tried a numerous amount of different dressings in the past without success. So far PolyMem has been the least traumatic enabling much faster dressing changes and a certain degree of improvement to her most problematic wound. This in turn has led to less anxiety at dressing changes which has improved her quality of life considerably.



Day 1

Assesment at the Debra House. Pre-medicated with paracetamol and benzodiazepine due to anxiety and pain usually caused by dressing changes. After medication pain score according to VAS 2 and itching score 5. Background pain without medication is usually a score 5. Other wounds not shown here are on an elbow and knee. A swab shows positive results for Staph aureus on the knee. The wound is irregulat and extensive with wet serous exudate, covered with slough, surrounding skin red and purplish coloured.



Day 7

The patient was much more relaxed when she came to use. No pre-medication as bathing was not needed. The mother had changed the dressings twice daily. Pain scores fluctuated between 1 and 2. The wound is looking much cleaner with flatter edges. Bottom part of the wound shows healthy granulation tissue, the neck area is still slightly sloughy. Even though the removed dressing was soaked the wound itself did not look as wet anymore.



Day 38

Dressing changes reduced to once a day since one week. The patient experiences more itching whith daily changes compared to twice a day. Itching continues to be worse at night when the score fluctuates between 5 and 8. The wound continues to reduce in size and there is less slough on the neck area. The clavical wound slightly enlarged due to scratching. In general the family experience an improvement.

Bathing was not needed at every dressing change which made the changes less traumatic and faster to perform. Pain score stayed around 1, itching fluctuated between a score of 2 and 5, nights tended to be worse with a score of 8. At around day 50 the wound started to become wet and sloughy again so the dressings needed to be changed twice daily. Prontosan solution was used to cleanse the wound prior to PolyMem application. Overall both the mother and patient appreciated how quickly and easy it was to change the dressings. They no longer needed pre-medication and saved over an hour a day as the changes were so simple. The wound is slowly improving and the status of the surrounding skin has also improved and become paler.



METHOD

Two girls with different types of severe EB were included. One had Herlitz Junctional EB (JEB-H) and the other Recessive Dystrophic EB (RDEB). Most dressing changes were performed at home by the family with weekly control visits at the EB House. During these visits wounds were measured and photographed and the patient diary checked. The diary contained information on pain, pruritus, woundsize, dressing change time as well as personal experience of the dressing and wound healing. Dressing changes were performed according to exudate level, often on a daily basis. Assessment period was three months or longer depending on the availability of the dressings.

PolyMem® dressings are non-adherent and contain components which draw and concentrate healing substances from the body into the wound bed to promote rapid healing while facilitating autolytic debridement. PolyMem® dressings have a documented effect on reducing tissue inflammation and pain.

RESULTS

Wound status dramatically improved in both patients; wound size reduced and hyper-granulation decreased. PolyMem® was easy to use and could handle large amounts of exudate. There was no increase in odour. The patient with JEB-H had a problem with bleeding but in spite of that her wounds continued to improve. The patient with RDEB was impressed by pain reduction as well as time savings by more than an hour when performing the dressing changes. Both patients experienced that their quality of life had increased.

DISCUSSION

In DEBRA Chile we have a total of 186 patients that live with EB. About 40% of these patients have severe wounds. The only dressing that seems to have an effect on these wounds is PolyMem®. Our main issue is that dressings are not reimbursed in Chile and ethically, should we show our patients an effective dressing that we cannot afford to buy for them? However, we will continue to try get support to obtain this effective dressing as a daily treatment for our most severely affected patients.

JEB-H, 8 years old

This 8 year old girl has a very severe type of EB called Herlitz which is characterized by severe airway problems and very difficult wounds. These wounds heal very slowly and often become chronic. We normally use traditional Vaseline gauze but this has caused her wounds to deteriorate and hypergranulate. She has had a tracheotomy since she was 1 year old. At the age of 7 her condition deteriorated; she had serious malnutrition with a weight of 16,4 kg and she was anemic with an Hb og 5,8 mg/dl. The anemia was caused by the extensive bleeding at every dressing change. We had tried for years to find a dressing that could improve her wound status. When we received a large donation of PolyMem she was the first patient we tried it on. Ten weeks later we could see a remarkable improvement (see photos below). Chronic difficult wounds that had never healed were smaller in size and were no longer as hypergranulated. This made a great impact on her quality of life. She was feeling better and started to walk again, giving her more strength and self-reliance.

Left side



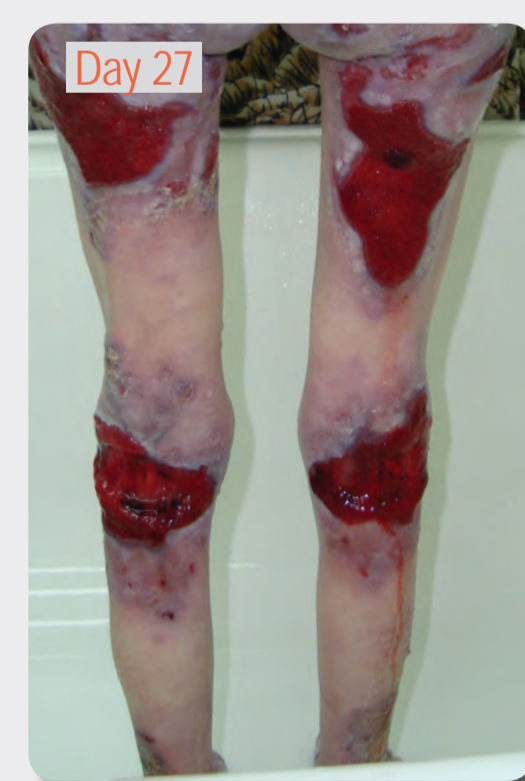
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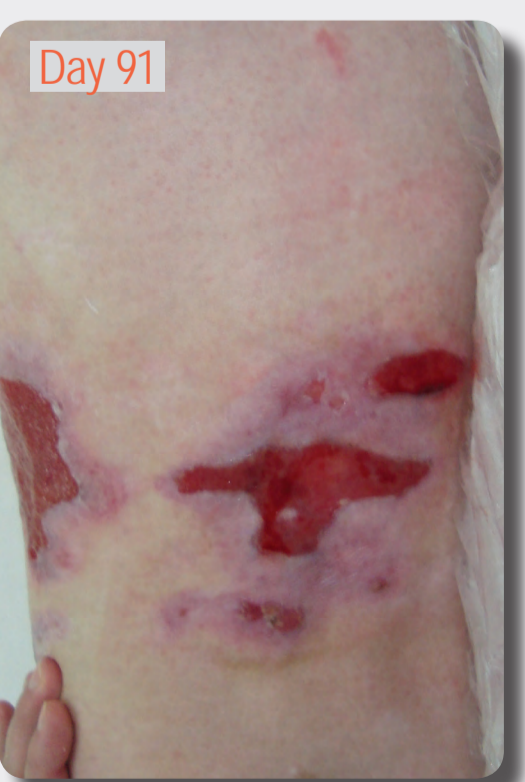
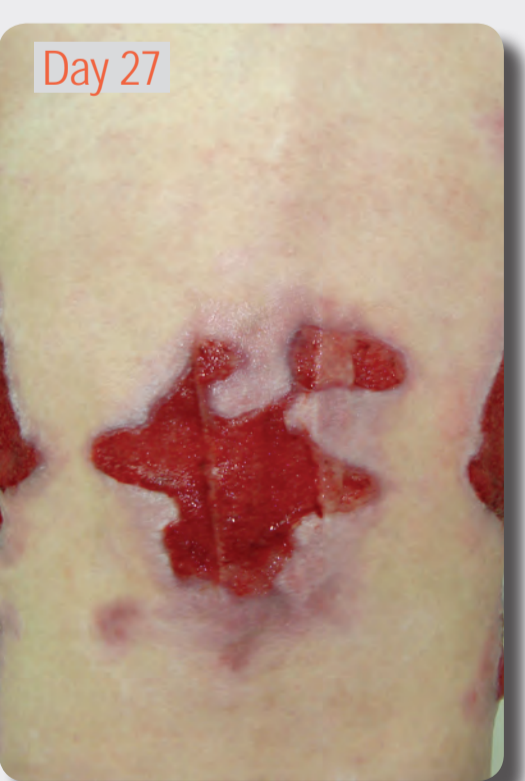
Right side



Back legs



Back



Due to the extent of her wounds we needed about 24 rolls of 20x60cm PolyMem a month. Every time we ran out of products her wounds immediatly started to deteriorate. Unfortunately she continued to bleed a lot due to her clotting disorder.