

# Use of a Super-Absorbent Drainage Dressing for Gastrostomy Management in Children with Epidermolysis Bullosa

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## Introduction

Leakage of gastrostomy contents can result in pain, excoriation and damage to the peristomal skin. Constant changes of saturated dressing materials are painful, time consuming and expensive. In addition, soiling of clothing is embarrassing for the child as the resulting staining and odour are very noticeable and can affect relationships with peers. Children with rare genetically determined skin fragility syndromes such as epidermolysis bullosa (EB) are at particular risk of skin breakdown, wounds and ulceration.

In the current absence of effective long lasting treatments management focuses on a multi-disciplinary approach which includes nutritional supplementation, pain control and skin and wound care. Long-term enteral feeding may be required to optimise nutrition for those with severe forms of EB, in whom intake is compromised due to poor appetite, oral blistering and dysphagia. In addition, vastly increased nutritional requirements are necessary to compensate for losses and aid wound healing. Regular oesophageal dilatations temporarily improve swallowing when strictures present in patients with dystrophic EB.

Some children require long term enteral feeding but the fragility of the skin around the stoma and delayed gastric emptying resulting from scarring and inflammation of the stomach wall can lead to intractable leakage with subsequent widespread skin loss affecting the skin over the abdomen. A small number of children require gastro-jejunal feeding which enables absorption of nutrients by bypassing the stomach. However, gastric contents will continue to leak from the gastric port with exacerbation following any oral intake.

Despite H2-receptor antagonists and proton pump inhibitors to neutralise the acidity of the gastric contents and regular application of barrier products the continual leakage onto the excoriated skin is very painful.

## Case Study

L is a 10 year old girl with severe generalised dystrophic epidermolysis bullosa. She has had a gastrostomy tube in situ for 4 years but over the last 12 months this has developed intractable leakage. Insertion of a gastro jejunal tube has ensured adequate delivery of nutrients but continual leakage of gastric contents resulted in wide spread excoriation over her abdomen and back. She suffered constant pain and frequent changes of both dressings and clothes were disruptive to both her schooling and sleep pattern.

Use of a super absorbent drainage sachet in combination with barrier products and a super absorbent pad have greatly reduced the area of excoriation and reduced levels of pain. Dressing changes are less frequent and clothing remains dry. L is more confident to eat and drink as she knows the subsequent leakage can be contained within the super absorbent dressings.



## Study Aims and Objectives

The aim of the study was to assess the effectiveness of a super absorbent drainage dressing (Sorbion sachet drainage®) in the care of children with epidermolysis bullosa. Sorbion sachet drainage® is a specialist "v" shaped dressing designed for use with catheters and drainage tubes. Its role is to remove excessive exudate and to prevent maceration and excoriation. The challenge was to see if the dressing was capable of absorbing gastric contents.

## Methods

In-depth case studies were carried out during the product evaluation process. Due the rarity of severe epidermolysis bullosa and thankfully with gastrostomy leakage affecting only a small proportion of those children, a total of 5 children took part in the study. Despite the small number recruited the study was very worthwhile considering the significant morbidity suffered by this select patient group. Children with an age range of between 4 years and 14 years who had excoriation and wounds affecting the peri-stomal skin were selected for the study. The peri-stomal and ulcerated skin was protected with a barrier product and then covered with either a Soft Silicone mesh or Lipido Colloid dressing dependent on patient choice. The super absorbent drainage dressing was then placed around the gastrostomy device and covered with padding to absorb excess gastric leakage. In cases of extreme leakage a super absorbent pad was used over the top of the drainage dressing. Patient preference was for Sorbion Sana® as this was soft and conformable and has the ability to contain a large volume of fluid.

Factors considered were the requirement of a dressing for:

- Absorption of gastric contents
- Protection of vulnerable skin
- Comfort and pain reduction
- Potential to heal wounds

## Results Summary

All 5 children tolerated the dressing well and found it comfortable. In 2 children leakage was contained within the super absorbent drainage dressing and additional padding and absorbency not required.

In all of the case studies children reported a reduction in pain.

Soiling of clothing was minimal and odour reduced

In all cases there was a reduction in the size of the wounds

## Discussion

**Sorbion sachet drainage® dressings are helpful for management of leaking gastrostomies in patients with severe EB. Absorption and containment of the gastric contents allows the skin to heal and prevents further excoriation and subsequent pain.**

## Conclusion

**Sorbion Drainage® has proved to be a useful addition to our EB dressing formulary. Enteral feeding is an important part of the management of children with severe EB but the problems resulting from leakage impact upon their well-being and quality of life. The use of super absorbent dressings avoids wide spread excoriation of the skin and reduces pain, odour and soiling of clothes.**