

# The Use of a Novel Bi-Stretch Silicone Dressing in the Management of Children with Epidermolysis Bullosa

Jackie Denyer EB Clinical nurse Specialist (Paediatric) Great Ormond Street Hospital and DEBRA UK (jackie.denyer@gosh.nhs.uk)

**Epidermolysis Bullosa (EB)** is the term used for a large group of genetically determined blistering skin disorders. There are 4 major types of EB with many subgroups. The common factor is a marked skin fragility with minimal friction and trauma resulting in blistering or skin loss. Fragility of the mucous membranes together with multiple co morbidities lead to progressive disability from scarring or reduced life expectancies in severe forms.

The aim of the study was to evaluate the effectiveness of the dressing's ability to reduce friction and trauma. The dressing (Spycra Protect) is a bi-elastic dressing with the elastic being active in both width and stretch. This bi-elasticity diminishes the effects of friction. This characteristic together with the gentle silicone adhesion suggested it would be effective and well tolerated by children with Epidermolysis Bullosa.

The dressing is non-absorbent, making it suitable for protection from trauma, blister sites and minor wounds only. A top layer of lycra fibres gives the dressing a smooth surface which minimises trauma from the child rubbing with the dressing to relieve itch.

A total of 45 children representing all forms of EB and with the age range of 4 months to 15 years were selected for the study.

The dressing was applied over intact skin to offer protection from mechanical trauma or over blister sites.

In all cases the dressing proved easy to apply and remove and was comfortable during wear time. No trauma resulted from the removal of the dressing and adhesive removers were not required.

## Results

The dressing was helpful	Pain relief from blister sites	Reduction in friction	Effective protection from trauma	Effective retention of finger dressings	Healing of minor erosions
38 children (EB simplex)	31 children (EB simplex)	31 children (EB simplex)	9 children (EB simplex and dystrophic EB)	2 infants (Junctional EB)	1 infant (Kindler syndrome)

5 children who have EB simplex and suffer from hyperhidrosis found the dressing difficult to keep in place, which is a problem with the majority of dressings in this group of children.

## Conclusion

Reduction of trauma is paramount in all forms of EB, both severe and mild. Using a dressing with bi-stretch properties reduces friction and shear. The protective silicone dressing has proved effective for this challenging patient group.



### Case study 1

Freddy is a 5 year old with severe generalised recessive dystrophic EB.

He is very restless at night and rubs his face constantly creating blisters and areas of skin loss. His parents now use bi-stretch silicone dressings to protect his face reducing the amount of damage caused.



### Case study 2

Aisha is a 4 year old girl with severe generalised EB simplex.

She has extensive blistering on the soles of her feet which are painful and restrict her mobility. Applying a sheet of bi-stretch silicone dressing reduces the friction and pain and her mobility has improved.



### Case study 3

Amy is a 3 year old girl with severe generalised dystrophic EB.

She uses bi-stretch silicone dressing applied to her finger web spaces to help delay digital fusion. The dressing is light and therefore does not restrict function. It can be applied over minor wounds.



This Poster was supported by Bullen Healthcare, the distributor of Spycra Protect.