# **Evalution of Polymem Finger Dressing Delivers Trauma Free Dressing Change**

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#### Introduction

We carried out a small audit of eleven patients using the PolyMem finger dressing for wound healing by secondary intention. The audit was undertaken in an Accident and Emergency Department in a general hospital. It is the author's intention that the results of these studies will enable other practitioner's to be informed on how this product performs in these case studies. PolyMem finger dressing provides a mild, non-toxic cleansing agent that is activated by exudate and helps debride necrotic tissue and supports autolytic debridement. Glycerin (also known as glycerol), a moisturiser contained in the dressing, keeps the dressing from adhering to the wound bed . Glycerin also reduces odour, soothes traumatised tissues, and supports autolytic debridement. The wound fluid allows the natural growth factors and nutrients to concentrate in the wound bed.

### Method

Employing the Polymem finger dressing technology, this evaluation reports the results of case studies of 9 males and 2 females. The author also questioned patients on how they found the dressing changes and the functionality of the dressing. Nurses' and carers' comments were also collected on the application and the freedom they enjoyed with this dressing in carrying out their hygiene needs. The patients were able to keep the finger and toe dressings in place whilst having a shower.

The patients with finger injuries were randomly selected from referrals to the Accident and Emergency Department. There was a broad age range from 7-70 years. The finger injuries were typical of the injuries experienced in the Accident and Emergency Department in a general hospital. The PolyMem finger dressing was changed between 2-4 days. All patients were supplied with the instructions on how to apply the dressing and it was demonstrated to the patients' carer so they could apply the dressing if they were happy to. Five of the patients were recruited one week after injury. Another group of six patients were recruited with acute finger injuries and followed up 7 days later in the Consultant's finger clinic. The Polymem finger dressing's ability to promote effective healing was noted, as well as any pain experienced on dressing change. The ten nurses' comments were collected on how they found the dressing compared to normal finger dressings for ease of application and ease of removal and if the dressing required soaking off or if the patient experienced any pain on removal. The patients' and main carers' comments were also collected.

## Results

All eleven patients treated with the new PolyMem finger dressing found them extremely comfortable and the application very easy and pain free. The conformability of the dressing allowed all the patients to be able to move their fingers despite the trauma wound they had sustained. The PolyMem finger dressing was applied by the majority of patients' relatives without the need to attend a healthcare professional for dressing change. All wounds healed with minimal scarring and the patients were pleased with the cosmetic appearance of their wounds. One patient commented, he "would like to see the PolyMem finger dressings in his first aid box at work". The patients would like them to be available in chemists at a reasonable price. A young girl required a smaller size dressing as the size 1 was too large, a smaller size is required for children as they regularly sustain trauma to their fingers.

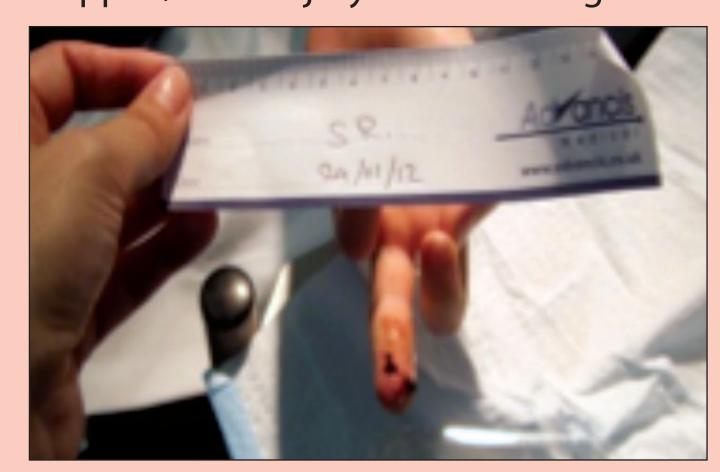
## Sharps injury from a Stanley knife





## Method and Results Continued.....

Trapped/crush injury to middle finger



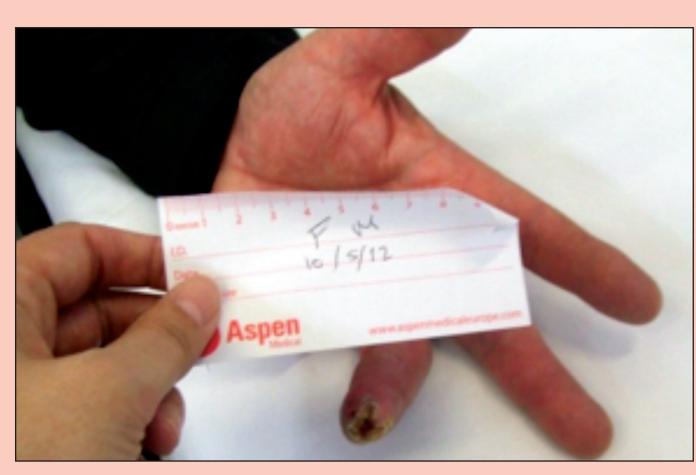




Crush injury and amputation of finger tip







Burn Injury





## Discussion

The new Polymem finger dressing appears to provide the optimum environment for healing with minimal scarring. Nurses compared the normal finger dressing that they employed to manage these trauma wounds against the PolyMem finger dressing. Clinicans and patients both commented on the reduction in pain during wear time and removal of the polymeric foam finger dressing. Polymem Finger and and toe dressings did not require soaking prior to removal in this small study.

## Conclusion

In the evaluation of 11 patient case studies, the patients found the dressings extremely comfortable and the author found them easy to apply and remove without any trauma to the patient. The Polymem finger dressings promoted effective wound healing compared with the normal finger dressings that were normally employed in A&E. The Consultant stated that he was very satisfied with the dressing and that it delivered everything he required from a finger dressing. The nurses also found the PolyMem dressing was easy to apply and remove and painless for patients with effective patient outcomes.

Polymeric membrane dressings used in this evaluation were PolyMem® Finger/Toe dressings (manufactured by Ferris Mfg. Corp., USA - distributed in UK by Aspen Medical).

Aspen Medical contributed to the poster design and provided product samples for use in our evaluation.

Poster presented at EWMA 2012, Vienna. Poster P280.

This work was conducted with the help of Mr Eddie Oforka A&E Consultant whom specialises in Hand Injuries.

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