

# A HYDRATION RESPONSE THERAPY (HRT) DRESSING IS A USEFUL ALTERNATIVE TO HYDROFIBRE/HYDROCOLLOID IN HEAVILY EXUDATING ACUTE ORTHOPAEDIC WOUNDS

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## Introduction

A hydrofibre/hydrocolloid (HF/HC) combination is highly effective in reducing dressing changes and surgical site infection (SSI) following elective and trauma orthopaedic surgery<sup>1</sup>.

However, patients with proximal hip wounds have less effective results due to excessive soakage. A new super-absorbent dressing which utilises Hydration Response Therapy (HRT) manages moderate to highly exudating wounds, due to its protease modulating properties and moisture managing inner layer<sup>2</sup>. The aim of this study was to evaluate this HRT dressing as an inner layer, combined with hydrocolloid as an outer layer in patients with excessive leakage following elective and trauma orthopaedic surgery.

## Aim

to evaluate an HRT dressing combined with hydrocolloid in patients with excessive leakage following acute elective and trauma orthopaedics surgery.



Figure 1: Infected, leaking wound after cemented Monk's hemiarthroplasty

## Methods

Prospective evaluation involved 22 elective and trauma patients with soakage requiring more than 2 dressing changes in the first 48 hours post-op from April to October 2010. Comparison of wear time and number of dressing changes were made to the original theatre dressing (HF/HC), SSI rate and incidence of wound washout under GA.



Figure 2: Hydration Response Therapy Dressing



Figure 3: HRT inner layer and Hydrocolloid outer layer in situ

## Results

A total of 22 patients from 480 (4.6%) admitted in the 6 month period were identified as having excessive soakage.

4 of these patients had an SSI (0.8%).

The wear time was 1.3 days in HF/HC group, and 4.2 days for HRT/HC ( $p < 0.05$ , paired T-test).

Number of dressing changes was 1.9 in HF/HC group, 1.3 for HRT/HC.

Of the 4 identified SSI patients, 1 had washout prior to HRT/HC, and 1 after using HRT/HC.

## Conclusions

Using HRT/HC reduced dressing changes and improved wear time, but had no effect on wound washout rate.

Common risk factors identified in this group were BMI > 30, use of high dose clexane or warfarin, steroids and rheumatoid arthritis.

HRT/HC should be considered immediately post-op for patients with factors associated with higher levels of exudate.

## References

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2. Cutting K, Acton C, Beldon P et al. Clinical evaluation of a new high absorbency dressing. Wounds UK, Harrogate International Conference Centre, 12-14 November 2007