



Cost effective wound management with Hydro-Responsive Wound dressings from a patient, clinician and NHS perspective

By Sharon Weeks - Wound Care Practitioner, Ashford Wound Medicine Centre. Vicarage Lane. LTS Ashford Kent Community Health NHS Trust

Introduction

Debridement is an important part of wound bed preparation and is required to move the wound forward to healing. This case study shows how choosing the right dressing to promote autolytic debridement can be cost effective to the clinician, patient and the NHS. There are different methods of debridement available to a clinician and the choice needs to be the most appropriate for the patient condition, wound characteristics, pain levels, clinical resources and the practitioner having the skills and knowledge to provide.¹ In this case study the most appropriate method of debridement was autolytic debridement due to patient's pain.

Background

The patient in this case study is a 64 year old lady with bilateral leg ulcers which she had suffered with for 6 weeks under the care of the community nursing team. Her past medical history included, obesity, lymphoedema and rheumatoid arthritis. She was referred to the wound care specialist by her community nurses as her wounds were not progressing to healing and her pain levels were extremely high. This meant her leg ulcers could not be treated with the required compression. On her first assessment she presented with the complication of surrounding venous eczema increasing her exudate levels. The patient had been prescribed oral antibiotics due to an infection being present in her left leg. Her leg had been previously dressed with honey gel applied to a hydrofibre dressing a super absorbent secondary dressing secured with a soft absorbent compression bandage to shape the limb and a type 3A light compression bandage in a spiral for support. The eczema was successfully treated with topical steroids. This revealed circumferential ulcers to both lower limbs, the left leg having a larger surface area and thicker layer of slough.

Method

Following a full holistic assessment on 13.11.17, including a pain assessment the left leg primary dressing was changed to a Hydro-Responsive wound dressing (HRWD®). The secondary dressings and supportive bandaged remained the same as previous treatment.

The main objective was to reduce pain and debride the wound which was 100% slough on first application (see photograph 1). As you can see from table 1 these objectives were achieved within 5 weeks of treatment. (see photographs)

Treatment was continued for one last dressing change then stopped as the devitalised tissue had been removed.

Date	Pain on wear time VAS Scale ² 1 minimal – 10 high	length	width	Exudate level	Infection Status	Slough %	Granulation %	Epithelial %
13.11.17	1st application, previous treatment 6	6.62cm	8.76cm	medium	infected	100%	nil	nil
15.11.17	1	6.7cm	6.66cm	low	infected	90%	10%	nil
17.11.17	1	6.34cm	6.93cm	low		90%	10%	nil
20.11.17	1	7.45cm	7.69cm	low	nil	85%	15%	nil
24.11.17	1	6.89cm	7.8cm	low	nil	80%	20%	nil
27.11.17	1	6.89cm	7.8cm	low	nil	80%	20%	nil
1.12.17	1	7.06cm	7.18cm	low	nil	70%	20%	10%
5.12.17	1	9.12cm	7.04cm	low	nil	15%	75%	10%
8.12.17	1	7.73cm	6.98cm	low	nil	17%	68%	15%

Table 1



08.11.2017



15.11.2017



27.11.17



05.12.17

Discussion

Autolytic debridement was the chosen modality for this lady due to her pain. This form of debridement can be described as slow but is the body's natural process of debridement which can be accelerated with the right choice of dressing.² Involving the patient in any clinical decision on treatment is always the best option, looking at patient's home circumstances and the impact on their quality of life.³ This lady's pain levels prior to application of the HRWD® where extremely high and she flinched as dressings were removed causing her dressing changes to be very traumatic for her and extra time was needed at appointments.

Results

Using data from this evaluation a simple cost analysis was completed, comparing costs of treatment prior to starting the HRWD®. As you can see by table 2 there was savings made in nursing time and dressings used.⁴ Due to the speed of debridement and the consequence of wound improvement this had an impact on the patients QoL and by Christmas her ulcers were healed, and she left the clinic wearing hosiery.

Conclusion

We had fast debridement for this lady using this dressing without the use of mechanical or sharp debridement, reducing her pain levels on dressing removal and during wear time.

Comparing to previous treatment this proved cost effective in nursing time and patient Quality of Life.

Cost comparison - Hydro-Responsive Wound Dressing (HRWD®) 10 weeks Vs 10 weeks Hydrofiber treatment pathway					
	No Appointments	Clinic Time (hours)	Product Cost	Nurse Cost	Overall Cost
HRWD® 10 week care pathway	21	10.5	£707.28	£462.00	£1,169.28
Hydrofiber® 10 week care pathway	30	15	£813.00	£660.00	£1,473.00
	No Appointments	Clinic Time (hours)	Product Cost	Nurse Cost	Overall Cost
HRWD® 10 weeks savings	9	4.5	£105.72	£198	£303.72
HRWD® Annual savings (extrapolated)	45	22.5	£528.60	£990.00	£1,518.60

Table 2

References

1. Grey D, Acton C, Chadwick P et al (2011) Consensus guidance for the use of debridement techniques in the UK. Wounds UK,
 2. Spruce P, Bullough L, Johnson S, O'Brien D (2016) Introducing HydroClean® plus for wound bed preparation: a case series. Wounds International.
 3. Orsted H, Keast D, Forest – Lalande L, Megie M F. Best Practice: Basic Principles of Wound Healing. Wound Care Canada.
 4. PSSRU Document University of Kent 2018 and Drug Tarrif pricing 2018
 5. Visual Analogue Scale (VAS) <https://www.evidence.NHS.UK>
- Hydro-Responsive Wound Dressing (HRWD®) is a trademark of HARTMANN UKI
Hydrofiber® is a trademark of Convatec Ltd