

NOVEL DEVICE FOR SHARP WOUND DEBRIDEMENT



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Introduction

The term debridement comes from the French word desbrider, meaning to unbridle. A modern definition for such sharp methods of debridement is the removal of dead or necrotic tissue or foreign material from and around a wound to expose healthy tissue using a sterile scalpel, scissors or both.¹ Practitioners undertaking sharp / surgical debridement must possess knowledge and be highly skilled in completing the task safely, effectively and be confident in their ability to deal with any complications that may arise.¹ Some practitioners will choose other methods which are mechanical, hydro surgery debridement machine, enzymatic, autolytic or biological² to reduce the complication that might rise. Surgical or sharp debridement will be given rapid results as compared with other methods.^{1,2}

Methodology

A novel sharp debridement device (EZDebride) was chosen for the sharp debridement. A total of 6 cases were selected for the study. All of the patients were chosen based on the skin slough percentage.

Result					
Patient	Slough % Before	Slough % After	Pain Score Before	Pain Score During	Time Duration for Debridment
Case 1	95%	0%	2	2	3 min
Case 2	80%	0%	3	3	4 min
Case 3	95%	0%	4	4	5 min
Case 4	95%	0%	3	3	6 min
Case 5	95%	0%	2	2	6 min
Case 6	80%	0%	2	2	2 min
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Case 1

58, Female, Malay, Left Foot DFU



Case 3

59, Female, Malay, Ray's Amputation of Left 4th & 5th Toe, Left Foot





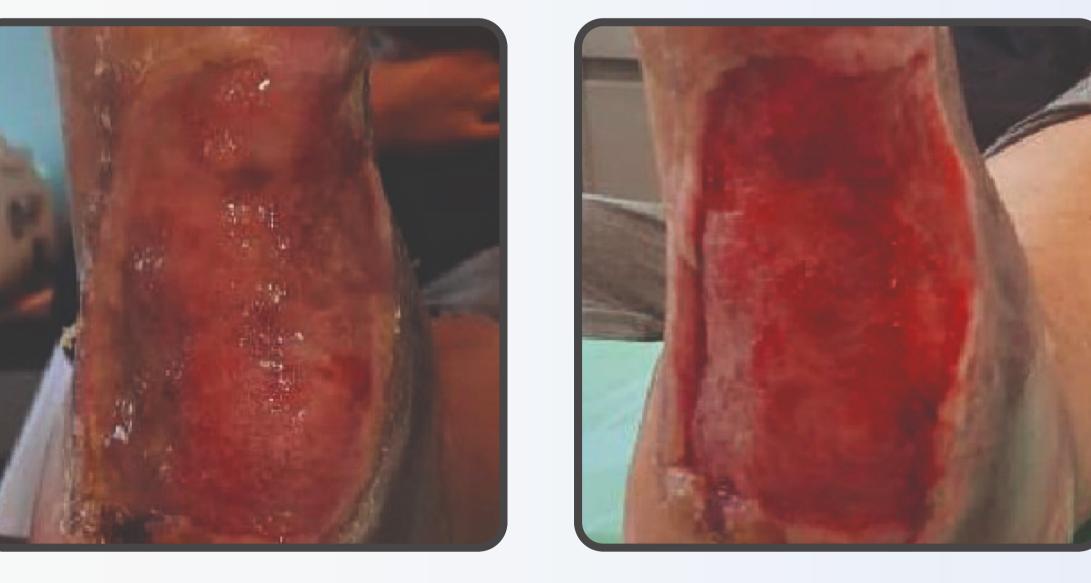
Case 2 58, Female, Malay, DFU







Case 4 58, Female, Malay, DFU



38, Male, Malay, Ray's Amputation of Left 1st & 2nd Toe, Left Foot

Case 5





Case 6 57, Male, Malay,Left Foot DFU



The EZDebride has been designed to provide a quick, safe and



straightforward method for removing non-viable tissue and bio-burden. Its ergonomic handle, precision – 13 cutting flutes, balanced head and flexible neck contributes to the efficiency and user-friendliness of the debridement process. The cutting flutes on the head of the tool permit uniform removal of dead tissue while lessening the risk of deeper injury. It also minimizes pain during the debridement procedure.

Conclusion

Sharp debridement is a highly skilled procedure and is performed in a controlled environment. Junior physicians and practicing nurses are justifiably reluctant to undertake traditional sharp debridement techniques without adequate teaching and support. However, with the EZDebride Wound Instrument, the process of debridement can be carried out with minimal training and supervision. The EZDebride Instrument enables the practitioner to control accidental deep tissue injuries and quicken the process of sharp debridement. The pain scores recorded on the patients were within the acceptable range.

Reference

1. David Leaper, 2002, Sharp Technique for Wound Debridement, accessed 20 September 2023, http://www.worldwidewounds.com/2002/december/Leaper/ Sharp-Debridement

2. Harikrishna K.R. Nair, The Compendium Of Wound Care Dressing & Other Modalities in Malaysia, 6th Edition 2022; PG 7 – 10

3. Al-Jalodi O, Serena LM, Breisinger K, Patel K, Harrell K, Serena TE: A Novel Debridement Device For The Treatment Of Hard To Heal Wounds: Prospective Trails. JWC 2021; 30(5):S32–36

