# Monofilament Debridement: A Synergistic Method for Rapid Removal of Devitalized Tissue

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## INTRODUCTION

Different types of debridement methods are used based upon many different factors including patient pain tolerance, size, condition, and etiology of the wound. Similarly, efficiency of debridement method and practitioner limitations are involved in the decision as well (Hartmann, 2016). As healthcare providers, we should consistently be aware of different types of debridement methods and how they may work synergystically for appropriate wound bed preparation to promote faster wound healing.

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Collagenase and MFD

## AIM

To investigate the synergistic use of monofilament debridement (MFD) in conjunction with three different types of common debridement methods -enzymatic (ED) conservative sharp debridement (CSD), and autolytic debridement (AD) in order to determine the reduction of devitalized tissue and improve overall effectiveness of wound management.

## METHODS

Three patients with recalcitrant wounds of similar condition were managed with the above mentioned debridement methods in outpatient clinics and skilled care settings. In this small study a monofilament debridement pad was introduced to improve overall effectiveness. The study period was four weeks with dressing changes three times per week or daily if enzymatic debridement was used. Photographs were taken.

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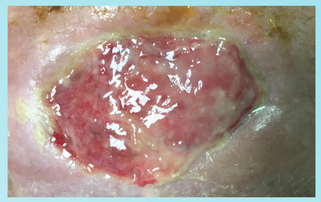
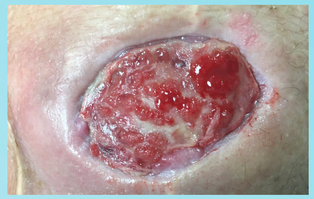
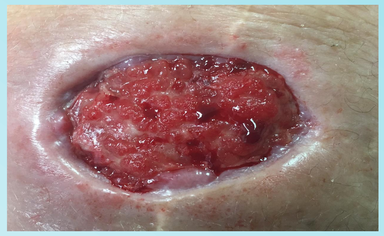
## RESULTS



Before Monofilament Debridement

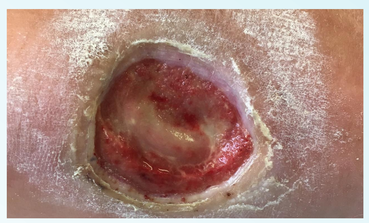


After Monofilament Debridement



After Conservative Sharps Debridement with curette

| Debridement Method | Wound Size Beginning | Wound Size End | Necrotic Tissue Beginning | Necrotic Tissue End |
|---|---|---|---|---|
| **Enzymatic** | 13.5 x 8.4 x UTD + tunneling | 9.5 x 7 x 3.5 no tunneling | 90% | 10% |
| **Conservative Sharps** | 3.5 x 4.9 x 0.2 + undermining | 3 x 4 x 0.2 no undermining | 50% | 0% |
| **Autolytic** | 1.5 x 1 x 1.3 + tunneling | 0.8 x 0.8 x 0.1 no tunneling | 100% | 0% |



Autolytic debridement with GV/MB in PVA Foam

## CONCLUSION

Use of the monofilament debridement device was found to work synergistically with all three types of debridement modalities to efficiently and effectively remove devitalized tissue safely and painlessly. There was noted reduction of devitalized tissue, which allowed for appropriate wound bed preparation and healing environment .

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