

Exceptional Results

Altrazeal™ Transforming Powder Wound Dressing: The Clinical Experience

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Introduction

The optimal moist dressing should maintain intimate contact at a wound surface yet allow high rates of moisture vapor transfer, prevent external contamination, while extending the dressing change interval. We demonstrate a new product that meets these criteria. Altrazeal™, a Transforming Powder Wound Dressing is designed to interact, protect and seal the wound bed, ultimately resulting in optimized wound healing. When applied to a wound, the nanoflex particles hydrate upon interaction with wound exudate. Hydration causes the particles to rapidly aggregate forming a strong uniform gel material with intimate contact to irregular surfaces of the wound bed.



Technology Description



Altrazeal™ Transforming Powder Wound Dressing is applied to wounds by pouring or sprinkling the product onto the open wound. Immediate and irreversible aggregation occurs upon contact with wound exudate. Normal saline or hypochlorous solutions may be added to provide additional moisture in wounds without heavy drainage. The hydrogel aggregate seals the wound and provides a strong but flexible dressing that has been maintained in some patients for up to 18 days. The dressing remains in intimate contact with the wound surface without a secondary dressing while allowing high moisture transpiration. The aggregate can be easily removed without harming underlying granulating tissue and then reapplied as necessary.

Conclusion

A series of patients with a variety of wound types have been successfully managed with Altrazeal™ Transforming Powder Wound Dressing. The early clinical experience demonstrates excellent patient toleration, with superb clinical results with improved wound healing trajectories. Additional benefits include a single application with extended wear times with or without a secondary dressing.



1. Control of Vascular Proliferation and Healing in Acute Wounds with Controlled Release of VEGF from Hydrogel Nanoparticle Dressings 2008 World Biomaterials Meeting, Oral Presentation, **Strategies for Vascular Regeneration Symposium**, Amsterdam, J. St. John (presenter), B. Ponder, D. Hatef, J. Huang, S. A. Brown.
2. Hydrogel Nanoparticle Aggregates at the Wound-Dressing Interface 2007 Fall Materials Research Society Meeting. Oral Presentation, **Solids at the Biological Interface Symposium**. Boston J. St. John (presenter), L. Waller, D. Moro, D. Hatef, S. A. Brown

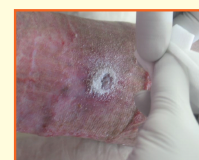
Application Technique



Sprinkle Altrazeal™ on Clean Wound Base

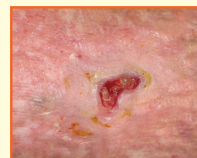


Hydrate Altrazeal™ with Saline

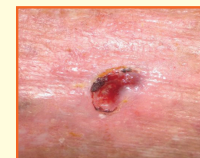


Cover Aggregated Altrazeal™ with Nonadherent Dressing

Case Study 1



7-29-2008
Ulcer present for 6 months.



8-5-2008
Altrazeal™ applied.



8-8-2008



8-12-2008
Wound Healed.

Case Study 2



7-7-2008
Ulcer present for 6 months.



8-18-2008
Altrazeal™ initiated.



9-15-2008



10-21-2008
Wound Healed.