

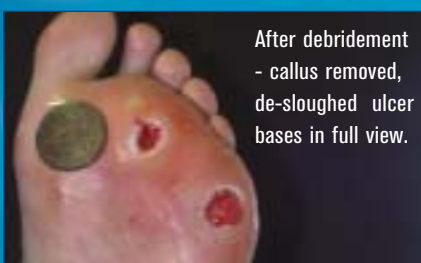
# WOUND BED PREPARATION: CLINICAL CONSIDERATIONS



Professor  
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*Leading medical and health care company, Paul Hartmann Pty Ltd, is committed to investing in clinical education and training in wound management for nurses around Australia. As part of that commitment, the company is sponsoring a series of articles on the stages of wound healing in the Australian Nursing Journal.*

*Professor Donald MacLellan, Area Director of Patient Flows, Hunter Area Health Service has independently prepared this article on wound bed preparation, an essential stage in wound healing.*



*"Advances have been made in the development of dressings and devices which may promote wound closure through creating an environment optimal for healing."*

The last two decades have witnessed significant progress in the treatment of chronic and problematic wounds. Advances have been made in the development of dressings and devices which may promote wound closure through creating an environment optimal for healing.<sup>1</sup> During the last five years, new drugs and biological materials have been introduced into the clinical setting, however, despite the purported benefits of these technologies, the majority fail without prior or concomitant wound bed preparation.

The primary advantages of wound bed preparation, more commonly referred to as debridement, include reduction of bacterial burden in the wound, removal of necrotic tissue which may impede closure, and facilitation of closure through the presence of a vascularised bed of viable cells. Management of exudate, while not debridement per se, is also a component of wound bed preparation.

Optimising the wound environment includes debridement. This may be accomplished surgically, enzymatically, biologically, mechanically, or through autolysis. Debridement assists with the removal of non-viable tissue which may harbour bacteria as well as removal of bacteria on the wound surface, while exposing underlying viable tissue (providing the patient has adequate vascular flow and tissue oxygen perfusion). Necrotic tissue, when left intact, impedes closure by delaying cell migration.

Management of wound exudate is also critical for promoting wound closure and for allowing

successful wound management through additional treatment modalities.

One treatment option is the use of products that promote autolytic debridement of chronic non-healing and necrotic wounds. These products work to soften and separate the necrotic tissue from the healthy, viable tissue, and accelerate the timeframe for wound healing.

In summary, thorough wound bed preparation may significantly contribute to wound repair while creating an environment which optimises the success of adjunctive treatments, including topical dressings, pressure reducing and relieving devices, and advanced modalities. Care and treatment of problematic wounds must consider control of intrinsic and extrinsic factors, debridement, reduction of bacterial burden, exudate management, and the introduction of adjunctive modalities designed to assist and expedite wound closure. A panacea for all patients or all wound aetiologies does not currently exist. The specific needs of each patient should be determined through a complete and thorough patient and wound evaluation. Only then can the nurse determine the most appropriate clinical care.

**Reference:** 1. Thomas S: Update: a guide to dressing selection. J Wound Care 6: 479, (1997).



For further information about TenderWet Active, Hartmann's product for autolytic debridement, or other Hartmann products, please call Hartmann on Phone 1800 805 839.