Wound Debridement

Wound debridement is the process of removing necrotic, nonviable/dead tissue from pressure ulcers, burns and other acute and chronic wound beds to expose healthy tissue and facilitate optimal healing. The method of wound debridement is determined by a qualified provider following a careful assessment of the patient and goals of care; characteristics of the wound and wound vascularity; practice setting and skill level of clinicians involved in the care of the patient; and, the availability of resources (Wound, Ostomy Continence Nurses [WOCN] Society, 2015). Wounds must be periodically reevaluated by the provider for progression of healing and modifications made as necessary in the medical plan of care.

Wound Debridement Methodologies

Licensed nurses with specific training, demonstrated competencies and ongoing competency assessment, and policies and procedures in place for the practice, may engage in wound debridement methodologies that do not require sharp instrumentation when there is no urgent clinical need for drainage or removal of devitalized tissue (National Pressure Ulcer Advisory Panel, 2014).

**Autolytic.** A natural and highly selective process by which endogenous phagocytic cells and proteolytic enzymes break down necrotic tissue; relies on moisture-retentive dressings, adequate perfusion and the absence of infection. Autolysis can be used alone or in combination with other techniques.
Biologic. The application of sterile, medical grade larvae (maggots) into the wound to introduce proteolytic enzymes for the cleaning/debridement of dead/necrotic tissue. Maggots also promote disinfection by killing bacteria and secrete chemicals and other substances that stimulate natural wound healing processes.

Enzymatic. Requires the application of exogenous proteolytic enzymes, or collagenase, to the wound bed; can be used with autolytic and mechanical debridement techniques.

Mechanical. Nonselective, physical method of removing both viable and nonviable tissue and debris from a wound using physical force, including wet to dry dressing removal, wound irrigation or pulsatile lavage techniques.

It is the opinion of the Nebraska Board of Nursing that nonsurgical techniques, termed Conservative Sharp debridement may only be performed by Registered Nurses (RNs) with extensive nursing knowledge and training in anatomy and sharp debridement techniques. Education and certification for specialty practice in wound management is recommended.

Conservative Sharp. Removal of clearly identifiable devitalized tissue to above the level of viable tissue using sharp instruments, including but not limited to scalpels, scissors and curettes. Minimal pain and bleeding are expected. Repeated debridement is often required.

Conservative sharp techniques are distinguished from Sharp Debridement. Sharp debridement methodologies are either surgical or nonsurgical, and not within the scope of practice of the RN. Sharp debridement can increase a wound in length, width and depth because the true extent of the wound is revealed as necrotic tissue is removed (WOCN Society, 2015).
References:
