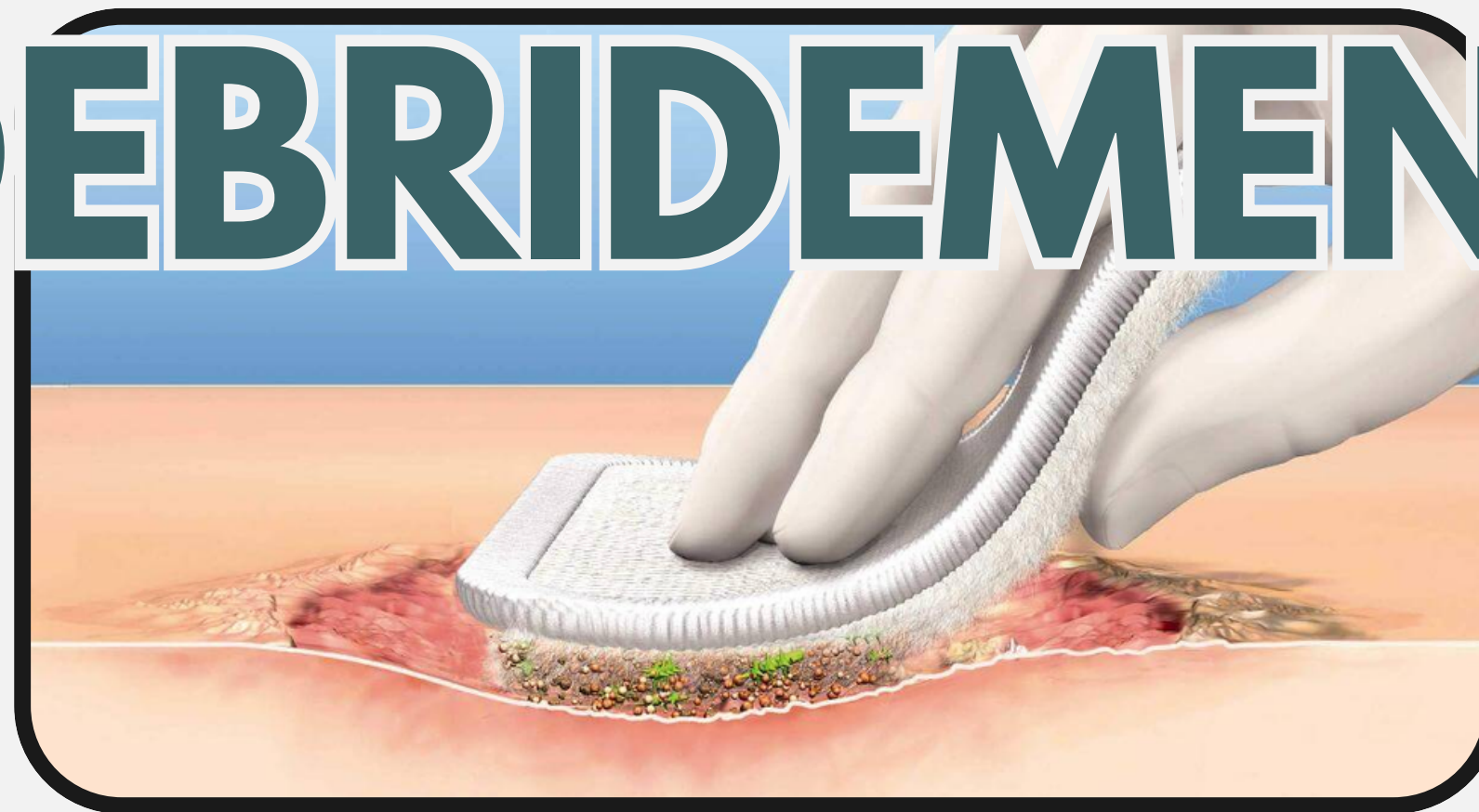


WOUND DEBRIDEMENT



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SPEEDING THE HEALING PROCESS

Wound debridement is the removal of necrotic, dead tissue from the wound bed. It also plays a vital role in the tissue management concept of wound bed preparation. Wound bed preparation is the comprehensive approach we use to get our chronic wounds to heal.



There are two main categories of debridement: selective and non-selective.

- **Selective methods** are when only necrotic, non-viable tissue is removed from the wound bed.
- **Non-selective methods** remove both necrotic tissue and viable living tissue.

WHEN IS IT NECESSARY?

- For acute wounds, the body naturally works to remove dead tissues (a process referred to as autolysis). During the acute inflammatory stage of healing, the body clears out dead tissue and contaminants to allow for healing. However, in chronic wounds, damaged cells get in the way of this process and can require assistance through debridement. Certain conditions such as diabetic ulcers or severe burns can also be good candidates for wound debridement.

- While wound debridement can be applied to most types of slow healing wounds, a wound care specialist plays a major role in determining whether wound debridement is needed and what type should be utilized. The process generally starts with a holistic wound care assessment to identify any underlying causes of the wound, anything that could slow the healing process, and establish wound care goals.

IDENTIFYING NECROTIC TISSUE

- Dead or necrotic tissue may be loose and moist, or dry and firm.
- Oxygen and nutrients can't penetrate a wound that is impaired by necrotic tissue.
- Dead tissue is the breeding ground for bacteria, and the eschar may mask an underlying abscess.

- Necrotic tissue that is soft, moist, stringy, and yellow is referred to as slough (devitalized/avascular) tissue.
- It may be white, yellow, tan, or green and may be loose or firmly adherent
- Removing necrotic tissue restores the local vascular supply to the wound and improves healing. Caution is indicated, all necrotic heels should be debrided.

- Pyoderma gangrenosum is one example of a wound that should not be debrided
- Septicemia is another condition that requires serious caution before initiating debridement.
- Chronic wound care begins with treating the cause and patient-centered concerns, including pain and activities of daily living.

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DEBRIDEMENT METHODS

These five major debridement methods for wound clinicians are easy to remember (BEAMS), and key to the wound healing process. Debridement methods can be categorized under two main types.

Selective Methods

- **Biological debridement**
- **Enzymatic debridement**
- **Autolytic debridement**

Non-Selective Methods

- **Mechanical debridement**
- **Sharp debridement**



BIOLOGICAL DEBRIDEMENT

What is Biological Debridement?

Biological debridement is also known as maggot debridement and involves using sterile medical maggots to remove necrotic tissue. These sterile maggots debride necrotic tissue by liquefying and digesting it, they also kill and ingest bacteria while stimulating wound healing.

ENZYMATIC DEBRIDEMENT

What is Enzymatic Debridement?

Enzymatic debridement is the use of collagenase ointment (Santyl) once daily to the wound bed. The ointment works from the bottom up to loosen the collagen that holds the necrotic material to the wound bed. It is a faster method than autolytic debridement, but slower than sharp debridement.

AUTOLYTIC DEBRIDEMENT

What is Autolytic Debridement?

Autolytic debridement is the slowest type. It uses the body's own enzymes to assist in breaking down the necrotic tissue. This is achieved by using products that maintain a moist wound environment. This type of debridement is not appropriate for large amounts of necrotic tissue or infected wounds.

MECHANICAL DEBRIDEMENT

What is Mechanical Debridement?

Mechanical debridement is a method that uses an external force to separate the necrotic tissue from the wound bed. This may be painful and removes non-viable as well as viable tissue. Methods include wet to dry dressings, scrubbing, whirlpool, and irrigation. Contraindications for mechanical debridement would be epithelializing and granulating wounds.

SHARP DEBRIDEMENT

What is Sharp Debridement?

The fastest method of debridement is the sharp method. There are 2 types, sharp surgical (done by a surgeon, physician, or podiatrist) or sharp conservative (done at bedside by a trained clinician). It involves the use of scalpels, scissors, curettes, or forceps. Sharp surgical is a major procedure that sacrifices some viable tissue, whereas sharp conservative is a minor procedure done at the bedside that removes non-viable tissue.

WHICH METHOD IS BEST?

The debridement method you choose for treatment will be based on a variety of factors, all of which need to be considered. These include:

- Wound characteristics
- Amount of necrotic tissue in wound
- Efficiency and selectivity of the debridement method itself
- Pain management for the patient
- Procedure cost
- Exudate levels of the wound
- Presence or risk of infection
- Patient care setting
- Patient's overall medical condition

NURSING INTERVENTIONS

Pre-Operative Nursing Interventions

- **Obtain a thorough history and physical examination to assess the patient's health status.**
- **Identify any potential risks or contraindications to surgery.**
- **Assess the wound characteristics, including its location, size, depth, appearance, and any signs of infection.**
- **Obtain informed consent from the patient for the procedure.**
- **Administer appropriate pre-operative medications, such as antibiotics, if indicated.**

NURSING INTERVENTIONS

Pre-Operative Nursing Interventions

- **Prepare the patient for surgery by shaving the surgical site, cleansing the skin with an antiseptic solution, and providing a surgical gown and drape.**
- **Monitor the patient's vital signs, including blood pressure, heart rate, respiratory rate, and temperature.**
- **Provide emotional support and reassurance to the patient.**

NURSING INTERVENTIONS

Intra-Operative Nursing Interventions

- Assist the surgeon in preparing the surgical field by maintaining a sterile environment.**
- Monitor the patient's vital signs and anesthesia administration closely.**
- Administer supplemental oxygen, if needed.**
- Provide assistance to the surgeon during the debridement procedure, including suctioning, irrigation, and instrument handling.**
- Ensure proper hemostasis (control of bleeding) throughout the procedure.**

NURSING INTERVENTIONS

Intra-Operative Nursing Interventions

- **Apply a sterile dressing to the wound.**
- **Monitor the patient closely for any signs of complications, such as bleeding, infection, or shock.**

NURSING INTERVENTIONS

Post-Operative Nursing Interventions

- **Monitor the patient's vital signs, pain level, and wound condition closely.**
- **Administer appropriate pain medication as ordered.**
- **Maintain a sterile dressing over the wound and change it regularly as instructed.**
- **Assess the wound for signs of healing and infection.**
- **Provide wound care education to the patient and family.**
- **Monitor the patient's response to treatment and address any concerns or complications promptly.**

THANK YOU!