Debridement: When and How?
(Contemporary Management for Podiatric Medicine and Wound Care Therapies)

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Definition:

- Debridement is the removal of infected, contaminated, damaged, devitalized, necrotic or foreign tissue from a wound.

- Evaluate wound edges and peri-wound skin

[Local Coverage Determination (LCD): Wound Debridement Services (L29128)]
Mechanical debridement:

- Wet-to-dry debridement
- Devitalized tissue dries and becomes attached to the gauze
- (So does healthy tissue)
Autolytic Debridement:

- Products include hydrogels, hydrocolloids, hydrofibers (which turn into gel when in contact with wound fluid) and honey-based products.
- Promoting the patients proteolytic enzymes (collagenase, elastase, myeloperoxidase, etc) that occur naturally in wounds.
- Maintain a moist wound environment
Enzymatic Debridement:

• using proteolytic enzymes in gels or ointments
• hydrolyse peptide bonds, in order to facilitate the removal of non-viable tissue from a wound
Larvae Debridement

- Maggot Debridement Therapy (MDT)
- The digestive juices secreted by larvae contain proteolytic enzymes, which selectively debride necrotic tissue
Debridement Devices:

- Jet Lavage
- Ultrasound
- Laser
Surgical Debridement:
Surgical Debridement:
To Debride, or not to debride - that is the question
• If there is not adequate blood flow for wound healing, surgical debridement will result in enlargement and further necrosis of the ulcer.

• skin perfusion pressure (SPP)
• pulse volume recordings (PVR)
• transcutaneous oximetry (TCOM or TcPO2)
• ankle-brachial index (ABI)
• toe-brachial index (TBI)
• American College of Cardiology (ACC)

• Resting ABI should be measured in both legs in patients with exertional leg symptoms, non-healing wounds, age 65 years and older, or 50 years and older with a history of smoking or diabetes.

≤ 0.90 = PAD
• European Society for Vascular Surgery (ESVS), CLI Guideline Committee Guidelines for Critical Limb Ischemia and Diabetic Foot, 2011

• ABI < 0.5

• toe pressure < 30 mmHg

• tcpO2 < 30 mmHg

= CLI

• Both foot pulses are absent to palpation. Absent or monophasic Doppler signals from one or both foot arteries.

• TBI < 0.7

• ABI < 0.9

= PAD
Severe PAD and severely impaired wound healing:

- Toe pressure < 50 mmHg
- tcpO2 < 30 mmHg
- ABI < 0.6

Consider revascularization
• Collateral circulation
• Temporarily Bedbound
What lies beneath?
KEEP CALM
AND
TRUST YOUR
PODIATRIST