



## A Short Note on Debridement

Amelia Mackler \*

Department of Physical Therapy, University of Pittsburgh, New York, USA

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### Description

Debridement is the surgical removal of dead, damaged, or contaminated tissue to help the remaining good tissue heal more quickly. Surgical, mechanical, chemical, autolytic (self-digestion), and maggot therapy are all options for removal. Practitioners in podiatry, such as chiropodists, podiatrists, and foot health practitioners, remove calluses and verrucas. Debridement is a crucial element of the healing process for burns and other major wounds, as well as some snake and spider bites. The problem tissue's limits may not always be clearly defined. When removing a tumor, for example, there may be micro metastases along the borders of the tumor that are too small to detect but could trigger a relapse if not removed. In such cases, a surgeon may choose to debride a piece of the healthy tissue around the tumor to guarantee that it is entirely eliminated. The fastest types of debridement are surgical or "sharp" debridement and laser debridement under anesthesia. They're incredibly selective, which means the individual doing the debridement has perfect control over which tissue is eliminated and which isn't. Surgical debridement can be done in the operating room or at the patient's bedside, depending on the degree of the necrotic material and the patient's tolerance. Typically, the surgeon will debride tissue back to viability, which is judged by the look of the tissue and the existence of blood flow in healthy tissue. Autolysis rehydrates, softens, and finally liquefies hard eschar and slough by using the body's own enzymes and moisture. Only necrotic tissue is liquefied during autolytic debridement. For the patient, it is also virtually painless. Using occlusive or semi-occlusive dressings that keep wound fluid in touch with necrotic tissue, autolytic debridement can be performed. Hydrocolloids, hydrogels, and transparent films can all

be used for autolytic debridement. It is appropriate for wounds with a small quantity of dead tissue and no infection. Chemical enzymes are compounds that slough off necrotic tissue quickly. Collagenase, varidase, papain, and bromelain are examples of enzymes generated from microorganisms such as *Clostridium histolyticum* or plants. Some enzymatic debrides are selective, whereas others aren't. This approach works effectively on wounds with a lot of necrotic material or eschar formation (particularly burns). However, the outcomes are varied, and the efficacy varies. As a result, this sort of debridement is done only when absolutely necessary, and it is not considered standard of care for burn treatments. Hydrotherapy, which involves selective mechanical debridement, can be utilized when tissue removal is required for wound treatment. Therapeutic irrigation with suction and focused wound irrigation are two examples of this. Baths with whirlpool water flow should not be utilized to treat wounds since the whirlpool will not target the tissue to be removed selectively and may injure all tissue. Whirlpools also provide a risk of bacterial infection, can harm delicate human tissue, and, in the event of treating the arms and legs, can result in edema issues. To remove burnt skin, hydro surgery employs a high-pressure, water-based jet technology. This should leave you with healthy, unburned skin. A Cochrane systematic review published in 2019 sought to determine whether burns treated with hydro surgery heal faster and have fewer infections than burns treated with a knife. Only one Randomized Controlled Trial (RCT) with very low certainty evidence was found by the review writers. Based on the results of this study, they concluded that hydro surgery is not superior to conventional surgery for the early treatment of mid-depth burns. To adequately answer this question, further RCTs are required.