

Ask the Expert
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Q. My physician recently diagnosed me with an acute wound and referred me to a wound care center for treatment. Would you explain the difference between an acute wound and a chronic wound?

A: When an injury occurs, the body's healing mechanism immediately initiates wound healing by hemocoagulation, and the migration of white blood cells and platelets into the area. The purpose is to lay down collagen and remove debris from the wound. In healthy people, an acute injury progresses to healing within two weeks. However, when the patient has underlying medical issues, acute wounds can fail to heal in a timely fashion and become a chronic wound.

Chronic wounds may lack adequate blood supply and sufficient oxygen for normal wound healing. Constant localized pressure over a weight bearing surface tends to compress both venous and arterial vessels, decreasing nutrition and oxygenation of the tissues resulting in tissue breakdown. Other causes of acute or chronic wounds are diabetes, autoimmune diseases, chemical or radiotherapeutic agents, infections and peripheral vascular disease.

The treatment of these chronic wounds must address the internal medical and the external environmental problems affecting the body part. Only when these issues are successfully addressed will wound healing occur.

Treatment goals for acute or chronic wound care include:

- Addressing internal medical problems and external environmental issues.
- Conversion of all chronic wounds to acute wounds by debridement of necrotic tissue, reduction of the bioburden, improvement of the wound nutrition, and changing the external environment about the wound. Bioburden includes non-viable tissue, excessive bacterial count, infection, edema and foreign materials. The presence of bioburden prevents white blood cells from wound healing in favor of wound debridement.
- Determining the proper wound dressing agents. The choice depends on the amount of wound drainage and amount of granulation tissue present in the wound bed.

The proper identification and conversion of chronic to acute wounds is essential for quick and uneventful wound healing.

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