Wound healing: time to look for intelligent, "natural" immunological approaches?

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Abstract:

There is now good evidence that cytokines and growth factors are key factors in tissue repair and often exert anti-infective activities. However, engineering such factors for global use, even in the most remote places, is not realistic. Instead, we propose to examine how such factors work and to evaluate the reparative tools generously provided by "nature." We used two approaches to address these objectives. The first approach was to reappraise the internal capacity of the factors contributing the most to healing in the body, i.e., blood platelets. The second was to revisit natural agents such as whey proteins, (honey) bee venom and propolis. The platelet approach elucidates the inflammation spectrum from physiology to pathology, whereas milk and honey derivatives accelerate diabetic wound healing. Thus, this review aims at offering a fresh view of how wound healing can be addressed by natural means.

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