

Vacuum-Assisted Closure Therapy: Case Report of Use over Exposed Tendon And Limb Threatening Infection in a Neuropathic Patient

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Purpose: Vacuum-assisted closure (VAC) therapy is frequently used for promoting healing in complex wounds. We herein present a case where this negative pressure wound therapy (NPWT) was used after extensive incision and drainage of a necrotizing foot and ankle infection in a neuropathic patient. The aim of this report is to demonstrate the utility of this modality in generating new tissue over exposed tendon and bone to enable salvage of a leg otherwise destined for amputation.

Materials/Methods: The patient is a 58 year old neuropathic man who was referred to us with systemic sepsis originating from a necrotizing infection of his right foot and ankle. We performed a wide incision and drainage on both medial and lateral foot, ankle, and leg followed by NPWT to manage his wounds. Although he had underlying pedal osteomyelitis we attempted to salvage the lower leg and ankle to allow for a subsequent Syme amputation.

Results: After a period of 16 weeks on antimicrobial and VAC therapy the wounds on his leg and ankle completely closed. This provided enough proximal soft tissue coverage to allow for a successful Syme amputation with primary closure. Following ambulatory total contact casting he was fitted for a prosthesis and remains healed without recurrence of infection.

Discussion/Conclusion: Avoidance of major amputation was achieved through appropriate surgical and antimicrobial management in concert with VAC therapy. This modality was effective in promoting granulation over exposed tendon and is a proven adjunctive therapy for managing complex wounds.