Wound Clinic 22.5kHz Contact Ultrasonic Powered Wound Debridement Increases Options for Limb Salvage: Decrease Cost is Advantageous

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Paraplegic Amputee with Pressure Ulcers, Stasis Dermatitis and Profound Arterial Ischemia Refuses Amputation

Presentation:
- Wound characteristics:
  - Ulcerated arterial disease
  - Pressure marks
  - Paraplegia with pressure from repositioned wheel chair foot plate
  - Venous insufficiency
- Nekhlo patient refused amputation and sharp debridement

Outcome:
- Two vascular surgeons recommended BKA. Patient refused BKA.
- 22.5 kHz Contact ultrasonic powered debridement* was recommended by vascular surgeons (including the author) to replace the pressure from motorized wheelchair use and reduce pressure.
- A second BKA was refused with the same comments.

Treatment:
- 22.5 kHz Contact ultrasonic powered debridement* was used two times at the wound clinic
- Bioengineered human skin substitute

Hemodialysis Patient Referred With Unrecognized Left Leg Arterial Embolic Lesions

Presentation:
- Hemodialysis hyper tension
- Steady pedal pulses
- Infection critically ischemic limb needing immediate debridement
- Venous insufficiency
- New technologies, pneumatic compression for arterial disease and hyperbaric oxygen to name two, are increasing wound clinic referrals for "limb salvage" patients.
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Outcome:
- Wounds would not have been debrided in such a timely manner if the patient needed to go to the operating room for immediate debridement.
- Cost savings benefits of effective debridement in an outpatient setting vs. the operating room, can be estimated to start at $10,400.
- Patient was able to receive immediate 22.5 kHz contact ultrasonic powered debridement* in wound clinic.

Necrotic Right Calf Skin Patches on Hemodialysis

Presentation:
- Hemodialysis hypertension
- Steady pedal pulses
- Infection critically ischemic limb needing immediate debridement
- Venous insufficiency
- New technologies, pneumatic compression for arterial disease and hyperbaric oxygen to name two, are increasing wound clinic referrals for "limb salvage" patients.
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Outcome:
- Patient was able to receive immediate 22.5 kHz contact ultrasonic powered debridement* in wound clinic.
- Cost savings benefits of effective debridement in an outpatient setting vs. the operating room, can be estimated to start at $10,400.
- Patient died of multiple complications after 5 weeks of effective debridement with 22.5 kHz contact ultrasonic powered debridement set on 300 watts with a 50 second average burn time.

References