Lessening Limb Loss with Interstate Collaboration in Charcot Arthropathy and Osteomyelitis



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INTRODUCTION

Patients in rural healthcare settings are more likely to lose salvageable limbs due to Charcot arthropathy and chronic osteomyelitis. These patients often have limited or no access to advanced technology or the specialized physicians who provide such treatments and interventions. Establishing a pathway for underserved areas to receive limb-saving treatment is crucial. Below-knee amputations should not be preferred simply due to limited access to specialists in Charcot reconstruction and osteomyelitis care.

METHOD

Four Charcot arthropathy and osteomyelitis patients were selected to receive advanced treatment out of state. These treatments included the percutaneous injection of gentamicin-based antibiotic sulfate*, Charcot reconstruction, and external fixation devices. Patients returned to their local wound clinic for post-operative care after the procedures. Their cases were managed collaboratively through telemedicine, involving the review of imaging and photographs. Any complications were managed locally and with prompt interprofessional communication between provider and surgeon.



Patients in rural or underserved areas with Charcot Arthropathy and/or Chronic Osteomyelitis can travel to specialized surgical centers for intervention, then return to local wound care centers for further management.



A special thank you to our patients, and our teams in Arkansas and Ohio.

RESULTS

- One patient has healed completely and has been discharged from the wound clinic, ambulating normally.
- One patient healed successfully from right Charcot intervention, and returned to Ohio for left side intervention.
- One patient developed proximal complications and required below-knee amputation; he had greater acceptance of the need for amputation, as "we did absolutely everything we could".
- One patient has recently returned to the local clinic for post-operative care.
- Two patients required a second trip to Ohio.

DISCUSSION

- It is feasible for patients to undergo complex surgical interventions and then return to their local wound clinic for follow-up care without the need for frequent travel to the surgical location.
- Patients should be informed of advanced surgery options available outside the area or state.
- The assumption that patients are unwilling and/or unable to travel must be challenged.
- We can and should expand protocols to additional locations using a hub-and-spoke model, which effectively facilitates referrals from wound care clinics to surgical specialists.
- This innovative approach to wound care referrals demonstrates that limb salvage can be highly achievable when patients actively engage with a dedicated team of wound care professionals and surgeons. Collaboration is key to fostering positive outcomes in the healing process.