

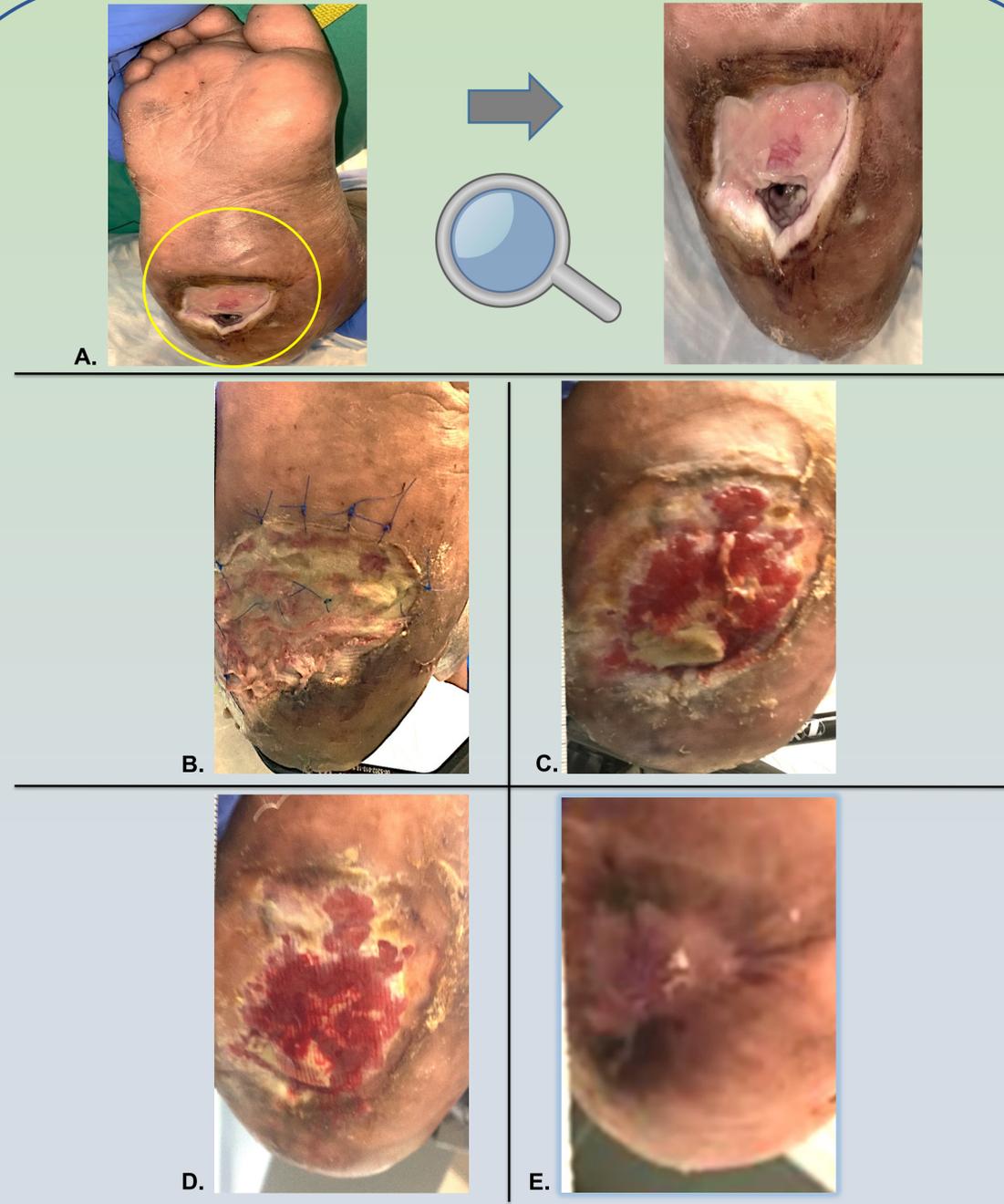


INTRODUCTION

- Osteomyelitis is a bone infection commonly associated with diabetic foot ulcerations, with about 50% leading to severe infections.
- A pathologic fracture is one of several complications that can result from neglected chronic ulcerations.
- This case presents a calcaneal pathologic fracture secondary to neglected osteomyelitis associated with a non-healing ulceration.
- The patient was referred to the wound care center for a second opinion following a recommendation of a below-knee-amputation (BKA) by his initial treating physician.
- A multi-faceted approach was utilized to obtain limb salvage.

METHODS

- Case follows a 33-year-old male with past medical history of diabetes, hyperlipidemia, hypertension, schizophrenia.
- Initial presentation: a full thickness ulceration following a plantar heel puncture wound injury to a separate facility.
- Records were obtained showing the patient had multiple debridement and graft applications attempted throughout a seven-month period, with persistent failure, as his osteomyelitis was never addressed.
- Calcaneal fracture noted on X-ray imaging with acute infection.
- Biopsies were obtained, and he was treated with IV antibiotics per infectious disease, staged debridement of the wound, and an antibiotic cement application at fracture site.
- Wound closure was obtained using cryo-preserved allograft application following surgical debridement, weekly local wound care supplemented with hyperbaric oxygen therapy for 30 days 5x week, bone stimulator, and daily 50,000 IU Vitamin D3.
- Final procedure consisted of removal of external fixation replaced by antibiotic calcaneal rod placement in the calcaneus.



- A. Initial presentation, positive probe to bone**
B. Application of cryo-preserved allograft post-surgical debridement
C. Following 4-months of clinical Local Wound Care (LWC), serial debridement
D. 6-months of LWC
E. 7-months of LWC - Healed

RESULTS

- The underlying osteomyelitis of the calcaneus was diagnosed and addressed which allowed us to heal the wound site within seven months.

DISCUSSION/KEY POINTS

- Untreated osteomyelitis can lead to potential loss of limb.
- A thorough work-up with radiographs and advanced imaging is key to the correct diagnoses.



- Osteomyelitis must be addressed prior to application of grafts and associated wound care, otherwise time to healing can be significantly delayed.
- There are several limb salvage treatment options that a patient can be offered before amputation is considered.

REFERENCES

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