

EP-216

절단이 고려되었던 골수염 동반 당뇨발에서 보존적 변연절제술과 유리피판 재건을 통한 장기 사지 보존: 증례 보고

(Successful long-term limb salvage of diabetic foot with osteomyelitis by conservative debridement and free flap coverage: A Chronological Case Report)



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We present a long-term limb salvage outcome in a 40-year-old woman with poorly controlled diabetes mellitus, severe systolic heart failure (left ventricular ejection fraction 26%), and chronic tarsal osteomyelitis with extensive soft tissue defect. Under conventional treatment principles, she had been considered a candidate for major amputation. However, after conservative debridement without radical bone resection, stabilization of the midfoot fractures and free flap coverage was performed to the dorsum of the foot, combined with prolonged culture-directed antibiotic therapy. The patient developed cardiac arrest owing to ventricular fibrillation but was successfully resuscitated. During long-term follow-up approaching 10 years, the flap remained viable and infection was ultimately controlled without progression to major amputation. The patient achieved and maintained full weight-bearing ambulation without episode of plantar ulceration or aggravation of deep infection. This case demonstrates that even in highly comorbid patients, individualized limb salvage incorporating conservative bone debridement, durable soft tissue reconstruction with free flap, and structured infection control can achieve sustained ambulation and long-term limb preservation.



Figure 1. Preoperative status after removal of the external fixation and multiple conservative debridements
(Left) Devitalization of the navicular, as well as the medial and middle cuneiform bones, was noted.
(Right) Fractures of the 2nd to 5th metatarsal bones, the lateral cuneiform bone, and the cuboid bone were noted.



Figure 2. 4 days after the free flap operation
Discoloration was observed at the distal flap margin. Plain radiographic images reveal navicular-talus pinning and longitudinal fixation using Kirschner wires extending from each of the five toes to the calcaneus, stabilizing the midfoot with multiple fractures.



Figure 3. Full weight-bearing ambulating status
The clinical photographs were taken 395 days after the free flap operation.