50 Years Ago in CORR

Resection of Major Portion of the Calcaneus

L. L. Wiltse MD, J. Gordon Batemen MD, and Sidney Kase MD CORR 1959;13:271–278

This month's symposium is devoted to infections of the musculoskeletal system. Infections of bone have always been disabling for patients and challenging to treat. Lister made the first major advance with his aseptic surgical techniques (see this month's Classic [1, 2]). The subsequent advent of penicillin in the 1940s radically changed our ability to treat these infections. However, even with antibiotics, surgery remains a mainstay of these infections.

Still in the early days of antibiotics, Wiltse and his colleagues in 1959 described a seemingly radical operation for osteomyelitis of the calcaneus in which they removed a major portion of the infected posterior portion of the bone and reattached the Achilles tendon to the plantar fascia (Figs. 1 and 3) [3]. Previous authors had reported complete resection of the calcaneus, but Wiltse and colleagues noted, "...in checking a very few cases of total removal that we could find, it seemed that occasionally a rather severe deformity resulted..." After achieving good function (Fig. 2) in their first patient, they performed the same procedure on another six patients and stated, "...the results have been uniformly excellent." As was common at the time, the criteria for this conclusion were not clearly described and the reader was left with the subjective statements of outcomes without

Fig. 1 Roentgenogram before operation of a case of hematogenous osteomyelitis of the calcaneus. Figs. 1–3, Case 1 (see table, p. 276). (Reprinted with permission and ©Lippincott Williams and Wilkins, from Wiltse LL, Batemen JG, Kase S. Resection of major portion of the calcaneus. *Clin Orthop Relat Res.* 1959;13:271–278.)

Fig. 2 Roentgenogram taken 11 years after resection of the calcaneus. (Reprinted with permission and ©Lippincott Williams and Wilkins, from Wiltse LL, Batemen JG, Kase S. Resection of major portion of the calcaneus. *Clin Orthop Relat Res.* 1959;13:271–278.)

knowing at what time after surgery these "excellent" results were achieved or for how long the patient was

disabled. They did note these results were assessed at periods of between 2 months to 11 years. Presumably none

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Fig. 3 Photograph taken 11 years after resection of major portion of the calcaneus. Note that the patient can stand well on tiptoe. (Reprinted with permission and ©Lippincott Williams and Wilkins, from Wiltse LL, Batemen JG, Kase S. Resection of major portion of the calcaneus. *Clin Orthop Relat Res.* 1959;13:271–278.)

of the infections recurred. The authors did describe the procedure as a “salvage procedure” since several of the patients had been previously offered an amputation to cure the infection. They mention the use of postoperative antibiotics, but without providing the details.

Such infections were relatively common 50 or more years ago partly

owing to the frequency of blood-borne spread of infections from other sites in the body. These hematogenous infections are relatively uncommon today and most cases of osteomyelitis now arise following open trauma or surgery on bones. Surgery remains a mainstay of treatment along with appropriately administered antibiotics. Despite the advances in surgical techniques and

many newer antibiotics, the treatment of osteomyelitis remains a challenge owing to the emergence of organisms resistant to antibiotics.

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