Take Down of Painful Ankle Fusion and Conversion into Total Ankle Arthroplasty
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Precis/Summary:
A painful ankle arthrodesis may progress into a pantalar fusion. The aim of this study was to report on a consecutive series of 30 patients with conversion to total ankle arthroplasty.

Abstract:
Introduction:
A painful ankle arthrodesis may progress into a pantalar fusion with its increased limitations and morbidity. An alternative treatment could be the takedown of the ankle arthrodesis and the conversion to a total ankle arthroplasty (TAA). The aim of this prospective study was to report on a consecutive series of 30 cases in which an ankle arthrodesis was taken down and converted to a TAA by using a current three-component ankle prosthesis.

Methods:
TAA was done in 29 patients (12 females [13 ankles]; 17 males [17 ankles]; mean age 58.3 ± 14.9 years [30.9 - 83.7] years) after ankle arthrodesis (27 ankles; 12.7 ± 11.9 [0.4 - 57.0 ] years after fusion) or attempted fusion (2 ankles with non-union after 1.5 [1.4 - 1.5] years).

Results:
Early complications included a fracture of the malleoli in 3 ankles, but all surgeries were successful, and no further revision was needed in any case until the latest follow-up at a mean of 5.5 ± 1.4 (2.3 - 7.7) years. The AOFAS- hindfoot score increased from preoperatively 34 ± 15 points to 66 ± 19 points. The average clinically measured ROM of 24.1 ± 10.1° (0 - 40°) amounted to 56.4 ± 28.8% (11.1 - 121.4%) of the range of the not affected contralateral ankle.

Discussion:
Our results were promising and showed high patient satisfaction regarding pain relief and regained function. As far as it is possible to compare these patients with those who underwent primary TAA, obtained results were slightly inferior. The reported technique represents a valuable alternative to current treatment options of painful sequels of longstanding ankle arthrodesis.