



Fig. E-1A

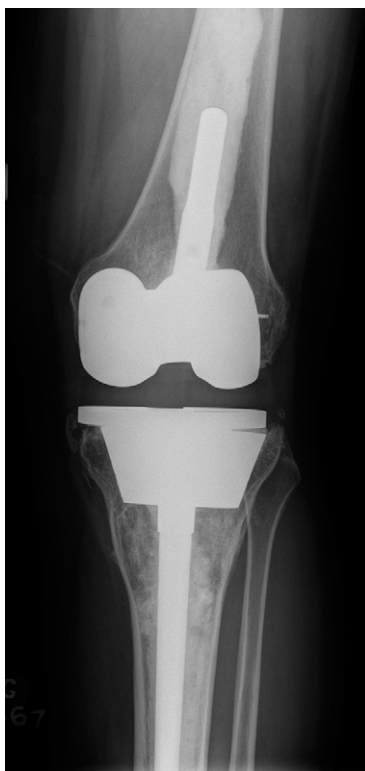


Fig. E-1B



Fig. E-1C

Figs. E-1A through E-1E Radiographs made over eight years postoperatively after index revision surgery of the left knee in a fifty-four-year-old male patient who presented with a painful total knee arthroplasty. **Fig. E-1A** Anteroposterior radiograph of the left knee demonstrating pronounced tibial osteolysis with well-fixed implants. **Fig. E-1B** Anteroposterior radiograph of the left knee demonstrating osteointegration of the tibial cone into the host bone. **Fig. E-1C** Lateral radiograph of the left knee demonstrating osteointegration of the tibial cone into the host bone.



Fig. E-1D



Fig. E-1E

Fig. E-1D Fluoroscopic-guided anteroposterior radiograph of the left knee demonstrating osteointegration of the tibial cone into the host bone. **Fig. E-1E** Fluoroscopic-guided lateral radiograph of the left knee demonstrating osteointegration of the tibial cone into the host bone.

TABLE E-1 All Studies to Date Involving Implantation of Porous Tantalum Tibial Cones in Revision Total Knee Arthroplasty

Authors	Year	Country	No. of Cones	Mean Follow-up (mo)	Results Related to Tibial Cone
Meneghini et al. ²⁶	2008	United States	15	34	Osteointegration of all cones; two deep infections (cone retention and antibiotic suppression); one periprosthetic tibial fracture (cone integrated but removed as part of tibial component revision)
Long and Scuderi ³⁰	2009	United States	16	31	Two early revisions (three and eight months postoperatively) for recurrent infection (cone was well fixed at time of explant); good outcomes were seen in the remaining fourteen cases
Lachiewicz et al. ²⁹	2012	United States	24	39	One deep infection necessitating explant and spacer placement (tibial cone was well fixed)
Jensen et al. ³²	2012	Denmark	10	24	Similar fixation patterns by radiostereometric analysis were seen between knees implanted with cones and those without cones; no re-revisions during follow-up
Villanueva-Martinez et al. ³³	2013	Spain	11	36	One infection necessitated tibial cone removal at six months postoperatively (cone was well fixed at explantation)
Schmitz et al. ³¹	2013	Germany	17	37	One tibial construct was revised at one year postoperatively (cone was well fixed)
Derome et al. ³⁴	2013	Canada	17	33	Because of firm ingrowth, one cone required en bloc resection at the time of explantation for deep infection
Rao et al. ⁷¹	2013	United Kingdom	25	36	Two deep infections (one patient underwent two-stage exchange and one was treated with chronic antibiotic suppression), two patients with shin pain attributed to end-of-stem pain
Current study	2015	United States	66	70	Three tibial cones were revised: one for infection, one for aseptic loosening, and one for periprosthetic fracture