

## Case study

### Courtesy of Mr. Alan Norrish

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#### Clinical particulars

35-year-old male presented with recurrent periprosthetic infection after complex hinged total knee replacement (TKR), performed 1 year ago, to treat severe post-traumatic knee osteoarthritis. 6 months after the initial procedure he developed periprosthetic infection. Change of polyethylene, synovectomy, microorganism specific systemic antibiotics, and repetitive arthroscopic lavage of the knee failed to control the infection.

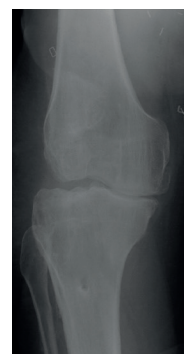
Because of the knee stiffness and the compromised soft tissue condition, a revision TKR was not deemed appropriate so decision was made to treat infection with knee fusion.

#### Treatment

In order to preserve the length of the leg, a two-stage approach with the induced-membrane-technique was implemented. First stage, the implants were removed, necrotic and infected bone was excised, and the knee was temporarily fused with a long Trigen nail. Normal length was preserved and the bone void filled with a PMMA spacer. Systemic antibiotics were administered. Second stage was conducted 3 months later, after clinical control of infection and normalization of CRP and ESR values. The nail was exchanged to an osteobridge nail and bone graft was harvested with Reamer-Irrigator-Aspirator from the contralateral femur. The bone graft and 10cc of STIMULAN beads were inserted to fill the bone void. Vancomycin and gentamicin were used to treat the infection.

#### Outcome

7 months post-operatively, the infection remained controlled, the bone had consolidated, and the patient had returned to daily activities without significant restrictions or symptoms. 2 years post-operatively, no recurrence of infection had occurred.



Presentation



Presentation



First stage –  
Post-operative



Second stage –  
Post-operative



7 months

For indications, contraindications, warnings and precautions see Instructions for Use. Concurrent use of locally administered antibiotics may affect setting time. This brochure may include the use of STIMULAN or techniques that go beyond the current clearance/approval granted by the relevant regulatory authority. Please contact your local representative for further information.

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