STIMULAN®

Case study

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Clinical particulars

67-year-old male high-speed polytrauma patient presented with right open grade 3A/B distal femoral fracture and patellar fracture. Fracture was grossly exposed with several free bony fragments. X-ray of right distal femur revealed displaced comminuted open fracture of the distal femur and patella. Initial surgery included an irrigation and debridement with definitive fixation. He presented 2 months later with minimal callus formation and maintained alignment of the fracture. At 5 months, patient had worsening pain and x-rays revealed non-union of the distal femoral fracture with hardware failure and loss of alignment.



A thorough washout was completed with debridement from superficial to deep layers to ensure all possible debris was removed. Necrotic bone and fibrinous material were excised. The bone deficit at the non-union fracture site was managed using 5cc STIMULAN Rapid Cure beads. Antibiotic treatment was provided to prevent infection. Open Reduction Internal Fixation (ORIF) was conducted on the right distal femoral non-union.

Outcome

Post-operative x-rays show partial absorption of STIMULAN beads at 1 month. At 6 months there was robust callus formation with full consolidation of the distal femoral fracture and complete absorption of STIMULAN beads. At one year, the patient remains infection free, without pain and is walking with no assistive devices.



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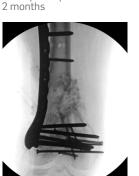
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Presentation



Initial post-operative -2 months



Intra-operative



Post-operative - 1 month





