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Transarticular Approach and Retrograde Plate Osteosynthesis (TARPO) Using Implants with Angular Stability – A Series of 17 Cases of Complex Distal Femoral Fractures Type C3/AO

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Abstract
Aim: The aim of this retrospective study was to evaluate the outcome of distal femoral fractures type C3/AO, using TARPO technique and plates with angular stability
Material and Methods: The study included 17 fractures type C3/AO, with 4 open fractures: 1 type I, 1 type II, and 2 type IIIA with bone loss/Gustilo. All patients were operated by TARPO technique using Less Invasive Stabilization System-LISS (4 cases), Locked Compression Plates-LCP (8 cases) and plates with polyaxial stability (5 cases). The excellent stability of the construct allowed fast knee rehabilitation. The follow-up period included at least 12 months.
Results: 15 fractures healed within a mean time of 12.6 weeks, while 2 cases with open fractures and bone loss required secondary bone grafting. We recorded no infection or implant failures. The outcome using Neer scale was excellent in 9 cases and satisfactory in 7 cases (1 patient with discontinued follow-up).
Conclusions: This demanding TARPO technique has the advantage of a faster rate of union and improved exposure of the knee joint. The locked plates provide a unique alternative in distal femoral fractures type C3/AO, as well as in osteoporotic and open fractures.
Key words: TARPO, distal femoral fractures, LISS, LCP, polyaxial stability

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