

Comparison Between Tension Band Wiring Using K-Wires and Cannulated Screws in Transverse Patella Fracture Fixation

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Abstract : Transverse patella fractures are routinely fixed using tension band wiring (TBW) using Kirschner wires and a wire in the shape of a figure of 8. The idea of the study was to compare the outcomes of the traditional technique against the more recently used cannulated screws and fiber tape in the shape of a figure of 8. We performed a retrospective cohort study of all the surgically fixed patella fractures from the year 2019 to 2022. The patients were divided into two groups TBW group and cannulated screws group. The primary outcome measure was the failure of fixation and the need for the removal of metalwork. Twenty-six patellar fractures were studied. TBW was used in 14 (53.8%), and cannulated screws were used for fixation in 12 (46.2%). There was one incident of metalwork failure in the TBW and one incident in the cannulated screws group. Five (35.7%) of patients in the TBW needed symptomatic metal work removed and One (8.3%) in the cannulated screw group. In both groups, the rate of fixation failure was low. Symptomatic implants, the most common complication observed, were higher in the TBW group in our practice. Although the small numbers in both groups, the hope of this study is to shine the light on the use of cannulated screws for patella fractures as it would reduce the need for a second operation and reduce the load on the already stretched services as well as improving the patient experience by not requiring further surgery. Although this is not a brand-new technique, it is not commonly used as there have not yet been any studies that demonstrate the lower rates of second surgery needed.

Keywords : patella, tension band wiring, randomised, new technique

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