

OPEN PATELLAR FRACTURE IN A 4-YEAR-OLD CHILD: A RARE CASE REPORT

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INTRODUCTION:

Fractures of the patellar are rare in children, as the patellar is largely cartilaginous and has great mobility. Our case is an open inferior pole of patellar fracture in a four-year-old boy who is treated with transcartilaginous tunnelling through the body of patellar with non-absorbable sutures and supplemented with a tension relieving patellotibial cerclage wiring.

REPORT:

In our case a 4-year-old boy was brought to our hospital by his parents with the history of accidental injury by a glass that cut directly into his left knee while jumping on a cracked glass table which broke and caused him to fall directly onto a broken glass piece on his left knee. On examination there was a large degloving wound on the anterior aspect of the left knee measuring about 10x7cm extending from the middle patellar region up to the tibial tuberosity. X-ray knee showed no ossification of the patellar. Surgery was performed immediately after admission. Intraoperative findings revealed fracture of the inferior pole left patellar with medial and lateral retinaculum tear and medial femoral condyle chondral injury (Figure 1). We then proceeded with doing krackow locking sutures over the patellar tendon and fixed the patellar tendon with transcartilaginous tunnel to the body of the patellar with ethibond 2 sutures and supplemented the patellar with tension relieving cerclage wire (Figure 2, 3). The medial and lateral retinaculum were repaired. 8 weeks post trauma, he was able to perform a full range of motion with excellent quadriceps function.



Figure 1



Figure 2



Figure 3

CONCLUSION:

In conclusion, open patellar fracture can be easily missed if no bony fragment avulsion is present on the X-ray film. A thorough examination of the knee and an awareness of this type of injury are of vital importance to avoid misdiagnosis. Trans cartilaginous tunnelling and patellotibial tension relieving cerclage wiring can be considered as a good option for surgery.

REFERENCES:

1. Gowtham, K.R., Nambiar, M.R. and Vanishri, V.S. (2016) Open Patellar Fracture in a 2-Year-Old Child: A Rare Case Report. *Open Journal of Orthopedics*, 6, 311-314. <http://dx.doi.org/10.4236/ojo.2016.610040>