

CHALLENGES IN MEDIAL PATELLOFEMORAL LIGAMENT RECONSTRUCTION OF MEDIAL BIPARTITE PATELLA IN ADOLESCENT

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Introduction: Ossification of the patella begins at the age of three from a single ossification center. Occasionally, two or more ossification centers can form the patella. Incomplete fusion of ossification center resulting in a divided patella is known as a bipartite patella.

Discussion: This is a case of a 13-year-old girl presented with left knee discomfort following a fall 4 months prior. Her description was that of a subluxated patella during a fall which reduced spontaneously. Physical examination revealed mild joint laxity with a Beighton score of 5 with abnormal patella tracking and apprehension test was also positive. CT scan and radiograph revealed bipartite left patella over the medial segment. After 2 years of rehabilitation, she found herself with low confidence level, lacking stability for active sports participation. The patient and her family were counselled on the proposed procedures and possible complication of surgery in an open physeal plate. The MPF ligament reconstruction was performed using semitendinosus ligament and loops on medial half of patella via anchoring to the extensor retinaculum of the patella to provide sufficient strength. The loop was fixed to the medial femoral condyle according to the Schottle radiological landmark. Post-operatively, the patient was closely monitored for 2 years with no significant adverse events. However, the fixation on the femoral condyle was noted to have shifted anterosuperiorly from the original Schottle landmark. Patient understood and currently enjoys an active lifestyle without any limitations.

Conclusion: Medial bipartite patella is extremely rare and not well reported. Medial patellofemoral ligament injury which is more common in female is troublesome when occurring in adolescents.