



## Rare intra-articular lipoma in knee joint - a case report

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### ABSTRACT

During the routine dissection and can of the 82 years of male cadaver the intra-articular lipoma was found in the left knee joint. Lipoma can be symptomatic be detected as incidental finding. It is very rare case report.

### INTRODUCTION

In all the benign neoplasms of the soft tissues the most common are the lipoma. They may arise almost anywhere in the body [1]. Although lipomas are common soft-tissue tumors, intra-articular occurrence is unusual [2]. Only 15 cases have been reported in the literature: 12 in the knee joint [2, 3], one in the shoulder [4], one in the elbow joint [4], and one within the facet joint of the spine [5].

### CASE REPORT

In the 82 years of male cadaver we found the lipoma with pedicle in the left knee joint. Excisional biopsy confirmed the diagnosis of lipoma. The stalk of lipoma was attached to the anterior horn of the medial meniscus near the anterior cruciate ligament. Size of lipoma was 1cm×0.8cm.

### DISCUSSION

Intra-articular synovial lipomas arise within the joint either by penetrating the synovial membrane or as a result of fat overgrowth from within the intra-articular synovial tissue [6]. Jaffe suggested that lipomas are likely to arise from the subsynovial fat on either side of the patellar ligament or on the anterior surface of the femur [3]. Pudlowski previously reported a case of a true lipoma located in the knee joint. He suggested that the lipoma was secondary to trauma, and in light of the elective localization of

lipoma in mobile articulations particularly vulnerable to repeated micro traumatisms (knee), it could be suggested that mechanical factors play a role [2,5]. The report of Bernstein AD presented the first of an intra-articular knee lipoma treated entirely by arthroscopic methods [7]. The arthroscopy revealed a smooth, globular, yellowish, encapsulated tumor extending into the lateral recess from the surface of the lateral condyle and the tumor was totally excised under arthroscopic guidance [8]. Arthroscopy revealed a lipoma arising from the posterior aspect of the synovial membrane, extending in the femoral intercondylar notch, between the femoral attachments of anterior cruciate ligament and posterior cruciate ligament [9].

The Min KD et al reported that a case of large intra-articular synovial lipoma at the lateral gutter of the knee joint, which presents as patellar dislocation on radiograph. [10]

Tudisco C reported the unique case of an 8-year-old boy with a painful locked knee caused by a solitary intra-articular lipoma in the anteromedial compartment of the knee. Intra-articular lipomas have been described in adult patients: only in five of them responsible for acute pain and locking of the knee. [11] Yilmaz E et al identified a lipoma that was seated in the retropatellar area and caused snapping of the patella during flexion of the knee joint. [12] Yeomans NP et al described a case of a painful locked knee caused by the torsion of an intra-articular lipoma. [13]



**Fig 1**

## CONCLUSION

The treatment of intra-articular lipoma is surgical or arthroscopic.

Symptomatic intra-articular lipoma of the knee joint can be successfully treated by arthroscopic resection. It should be considered in the differential diagnoses when examining a patient with sudden knee pain, and a catching or locking knee.

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## REFERENCES

1. Shuman R, Anderson WAD. Mesenchymal tumors of soft tissues. In: Anderson WAD, Kissane JM editor. Pathology. 7th ed. St. Louis: Mosby; 1977; 1874-1904.
2. Pudlowski RM, Gilula LA, Kyriakos M. Intraarticular lipoma with osseous metaplasia: radiographic, pathologic correlation. *AJR Am J Roentgenol.* 1979; 132:471-473.
3. Jaffe HL. Synovial chondromatosis and other articular tumors. In: Tumors and tumorous conditions of the bones and joints. Philadelphia: Lea and Febiger; 1958; 574-575
4. Weston WJ. The intrasynovial fatty masses in chronic rheumatoid arthritis. *Br J Radiol.* 1973; 46:213-216.
5. Husson JL, Chales G, Lancien G, Pawlotsky Y, Masse A. True intra-articular lipoma of the lumbar spine. *Spine.* 1987; 12:820-822.
6. Das Gupta TK. Tumors of the adipose tissue. In: Tumors of the soft tissues. Norwalk, CT: Appleton-Century-Crofts;

1983;p. 355-395

7. Bernstein AD, Jazrawi LM, Rose DJ. Arthroscopic treatment of an intra-articular lipoma of the knee joint. *Arthroscopy.* 2001 May; 17(5):539-41.
8. Hirano K, Deguchi M, Kanamono T. Intra-articular synovial lipoma of the knee joint (located in the lateral recess): a case report and review of the literature. *Knee.* 2007 Jan; 14(1):63-7. Epub 2006 Nov 28.
9. Motsis E, Vasiliadis HS, Xenakis TA Intraarticular synovial lipoma of the knee located in the intercondylar notch, between ACL and PCL: a case report and review of the literature *Knee Surg Sports Traumatol Arthrosc.* 2005 Nov; 13(8):683-8. Epub 2005 Jan 8.
10. Min KD, Yoo JH, Song HS, Lee BI. A case of intra-articular synovial lipoma of the knee joint causing patellar dislocation. *Knee Surg Sports Traumatol Arthrosc.* 2010 Aug; 18(8):1094-7. Epub 2009 Dec 8.
11. Tudisco C, Farsetti P, Febo A. Solitary intra-articular lipoma locking the knee in a young boy. *J Pediatr Orthop B.* 2008 May; 17(3):131-3.
12. Yilmaz E, Karakurt L, Yildirim H, Ozercan R. Intra-articular lipoma causing snapping in the patellofemoral joint. *Saudi Med J.* 2007 Jun; 28(6):955-8.
13. Yeomans NP, Robertson A, Calder SJ. Torsion of an intra-articular lipoma as a cause of pseudo locking of the knee. *Arthroscopy.* 2003 Mar; 19(3):E27.