

## ACL Ganglion Cyst, A Cause For Limitation In Flexion

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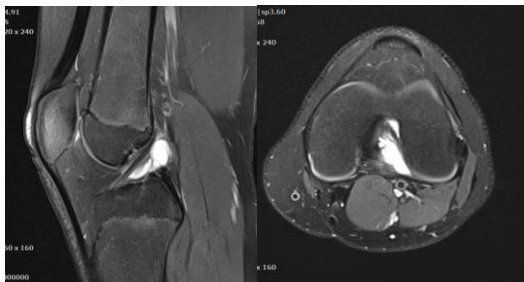
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### INTRODUCTION:

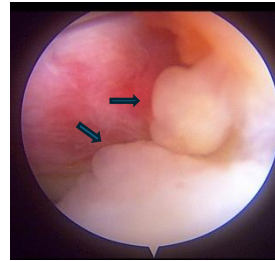
While ganglion cysts commonly arise from the wrist and palm, its presence in the knee joint is uncommon. A symptomatic anterior cruciate ligament (ACL) cyst can manifest as pain, clicking, locking, and limited range of motion. Here, we present the case of an adolescent with a left knee ACL ganglion cyst.

### REPORT:

This is a 14-year-old male who presented with left knee pain for the past 3 months, accompanied by limitations in flexion. There was no reported instability, and he denied any preceding trauma or sports-related injury. Joint line tenderness was absent, and the range of motion was 0 to 100°. Cruciate and collateral ligaments were stable, and examination for meniscal injury yielded negative results. Plain X-ray imaging showed no abnormalities. Magnetic resonance imaging (MRI) of the knee revealed a well-defined, multiloculated cystic lesion, hypointense on T1 and hyperintense on T2, located between the cruciate ligaments. The patient underwent arthroscopic debridement. Intraoperatively, the cyst appeared protruding from behind the ACL into medial aspect of its fibers. It was excised and sent for histopathological examination, confirming the diagnosis of a ganglion cyst. Three months post-surgery, the patient reported the absence of knee pain and had successfully regained full range of motion of the affected knee.



**Figure 1:** MRI T2 image showing hyperintense well defined multiloculated cystic lesion in between cruciates, origination from ACL.



**Figure 2:** Intraoperative image. Arrows show cyst arising from behind the ACL

### CONCLUSION:

The pathogenesis of ACL ganglion cyst formation remains unknown, however, theories suggest mucinous degeneration of connective tissue, synovial tissue herniation, ectopic synovial tissue and proliferation of pluripotent mesenchymal stem cells. ACL ganglion cyst are generally difficult to diagnose based on specific clinical symptoms and are not necessarily associated with trauma. MRI is very useful in making diagnosis. Mucoïd degenerative cyst is a differential. Symptomatic ACL ganglion can be successfully treated with arthroscopic debridement and excision, leading to successful resolution of symptoms.

### REFERENCES:

Zantop T, Rusch A, Hassenpflug J, Petersen W. Intra-articular ganglion cysts of the cruciate ligaments: case report and review of the literature. Arch Orthop Trauma Surg. 2003 May;123(4):195-8.