Post Traumatic Cystic Myxoid Degeneration of Anterior Ligament Cruciate Ligament and Ligamentum Mucosum

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INTRODUCTION:

Anterior cruciate ligament ganglion cyst and mucoid degeneration have been increasingly found to be associated with an insidious onset of chronic knee pain. It is reported that the lesion when arising anterior to the ACL tend to limit knee extension¹. These are often discovered incidentally on magnetic resonance imaging while evaluating symptoms of knee pain associated with a limited range of movement.

REPORT:

A 15-year-old boy presented with right knee pain after playing football. He noticed the gradual limitation of knee motion resulting in his inability to extend the knee fully. After four months, he noticed his knee was swollen with reduced knee motion.

Physical examination revealed an antalgic gait. The knee appeared swollen and tenderness was elicited over the anterior compartment of the knee. He was unable to extend and flex fully due to pain. Neurovascular assessment was unremarkable.

Plain radiographs showed normal findings. Magnetic resonance imaging reported a lobulated soft tissue lesion measuring 1.3 x 1.4 x 1.0 cm in diameter (**Figure 1**) at anterior adjacent to anterior root of lateral meniscus and tibial attachment of ACL. There were 2 cystic lesion components noted anterior to initial lesion. Intraoperative found there were 2 cystic lesions at the intercondylar notch which was attached to the ACL fiber (**Figure 2**) and also to the ligamentum mucosum respectively.

This is a rare condition where the symptoms developed after an injury during sports and the MRI findings are not suggestive for the more commonly seen sports knee injuries.



Figure 1: Two cystic lesion components

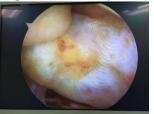




Figure 2: Mucoid lesion anterior to ACL and exposed ACL after excision mucoid lesion

CONCLUSION:

Intra-articular cyst should be a differential diagnosis in cases of unexplained knee pain or mechanical locking especially in the absence of trauma. MRI is an investigation of choice for the identification of cyst within the knee joint and also to assists in preoperative planning for arthroscopic excision.

REFERENCE:

Krudwig, W. K., K-K. Schulte, and C. Heinemann. "Intra-articular ganglion cysts of the knee joint: a report of 85 cases and review of the literature." *Knee Surgery, Sports Traumatology, Arthroscopy* 12 (2004): 123-129.