

# Significance of Meniscus Extrusion in Chondrocalcinosis: A Sonographic and Arthroscopic Perspective

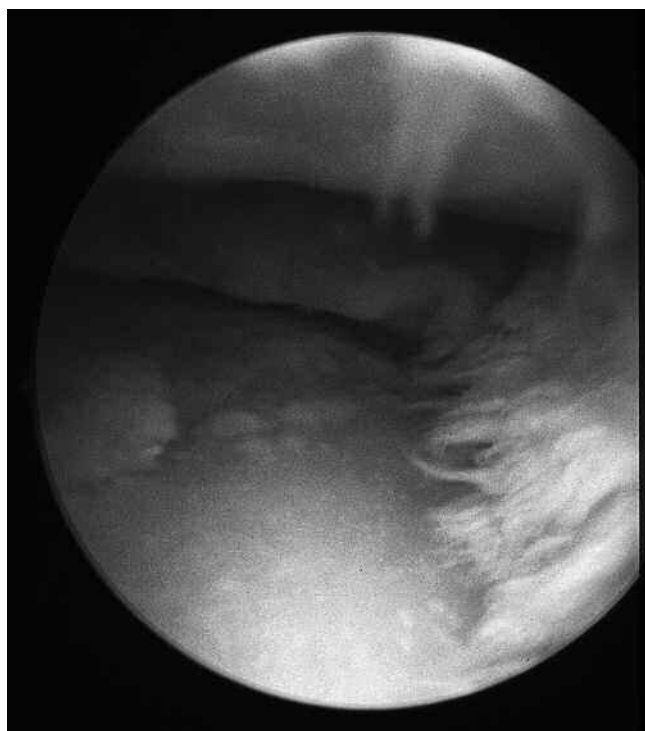
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A 72-year-old woman with chondrocalcinosis underwent arthroscopy for lavage and release of loose bodies. A severe loss of cartilage on femorotibial joint with massive degeneration and autolysis of medial meniscus were observed by arthroscopy (Figure 1). The ultrasound confirmed advanced osteoarthritis and showed an extrusion of medial meniscus. It appeared as rounded hyperechoic structure that projected out of tibial plateau and femoral condyle. A luxated meniscus more than 3 mm from tibial plateau is called meniscal extrusion, well known in arthritic knees<sup>1,2</sup>. The key point in this case is that chondrocalcinosis can explain a severe loss of hyaline cartilage leading to compression, which pushes

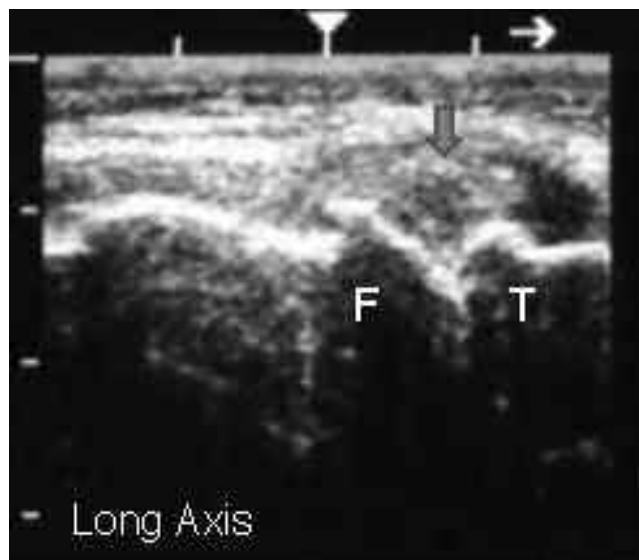
the medial meniscus out and extrudes it from the tibial plateau (Figure 2). At the same time, the bone to bone phenomenon does not permit ultrasonographic recognition of the small calcific spot observed during arthroscopy.

## REFERENCES

1. Rosalia CC, Morrison WB, Carrino JA. Medial meniscus extrusion on knee MRI: Is extent associated with severity of degeneration or type of tear. *Am J Roentgenol* 2004;183:17-23.
2. Puig L, Monllau JC, Corrales M, et al. Factors affecting meniscal extrusion: correlation with MRI, clinical, and arthroscopic findings. *Knee Surg Sports Traumatol Arthrosc* 2006;14:394-8.



*Figure 1.* Arthroscopic image of advanced osteoarthritis in the knee. Exposed subchondral bone in the medial femoral and tibial plateau surfaces. Small calcified spot on tibial plateau surface and marked lost substance and fraying of medial meniscus.



*Figure 2.* Longitudinal ultrasonographic view showing osteophytes at femoral condyle (F) and tibial plateau (T), and a loss of joint space. The rounding hyperechoic image (arrow) corresponds with extrusion of medial meniscus.