Clinical Image

Acute Chondral Patellar Injury, MRI – US Correlation

Manuel Wong-On1*, Lluís Til-Pérez2 and Carmen Porcar-Rivero3
1Department of Sports Medicine, University of Barcelona, Spain
2Football Club Barcelona Sports Medicine, Consorci Sanitari de Terrassa in Centre d’Alt Rendiment, Spain
3Consorci Sanitari de Terrassa in Centre d’Alt Rendiment, SantCugat del Vallès, Spain

CLINICAL IMAGE

A healthy 25-year-old male, elite taekwondo athlete presented with four day history of a traumatic left anterior knee pain. He also complained of instability and crepitus that limited his ability to train. At the time of examination, he could not bear full weight on the left limb. His gait was antalgic, favoring the right leg. There was increased effusion of the left knee, in comparison with the right, with tenderness in the region of the patellofemoral joint. Active left knee flexion was painful. Strength, sensation, and reflexes were normal in the bilateral lower limbs.

The magnetic resonance T2 imaging revealed a disruption of the articular cartilage of the lateral facet of the patella that did not affect the osteochondral surface, consistent with a grade 3 injury (Outer bridge). Ultrasound scan was performed by an orthopedic/sports medicine physician with 20 years of experience in MSK ultrasound that showed a disruption of the lateral anechoic articular surface of the patella, which correlated with the MRI (Figure 1, 2).

Cartilage defects of the knee are commonly seen during routine arthroscopy, with a reported prevalence of 63%, and with the patella being the most common location, the lateral and medial facets are affected in 7 and 21% respectively [1]. The classification systems referred to the location and depth size of the patellar cartilage. Arthroscopy is “gold standard” for chondral injuries diagnosis, as MRI has a high index of false negative in detecting chondral defects and ultrasound does not usually visualize them [1]. In this case, a good correlation of both MRI and US images could be obtained.

Treatment usually involves rest and activity modification. A progressive return to athletic activities is advised, starting with no-weight-bearing exercises, followed by strength training and correction of strength imbalances, and finally a gradual reentry into sport-specific activities. Nonsurgical treatment involves chondro protective medication and nonsteroid anti-inflammatory drugs [2]. Also useful are intra-articular injections of hyaluronic acid and platelets rich plasma [3].

This patient improved rapidly with a PRP ultrasound-guided injection, which allowed him to resume training. Ultrasound imaging showed an improvement in the chondral defect at 2 weeks follow-up.

*A Corresponding author
Manuel Wong-On. Residencial Sieras de la Unión, casa L18, 30304. Cartago, Costa Rica, Spain, Tel: 506-870-634-94, Email: manuwongon@gmail.com
Submitted: 24 August 2015
Accepted: 01 September 2015
Published: 03 September 2015
ISSN: 2379-0571
Copyright © 2015 Wong-On et al.
OPEN ACCESS
REFERENCES