

Case Presentation

Juan Pablo Ghisi, MD

Argus Diagnóstico Médico

Chief of MRI Department, Hospital General de Agudos "Dr. Juan A. Fernández"

(Buenos Aires, Argentina)

María Emilia Vidondo, MD

Member of the MRI Department, Hospital General de Agudos "Dr. Juan A. Fernández"

(Buenos Aires, Argentina)

Argus Diagnóstico Médico

See case resolution on page 309.

The patient is a 50-year-old woman who practices a recreational sport. Her chief complaint is anterior knee pain on the left knee. She presents with tenderness at the inferior and lateral patellar border. On examination, there is no involvement of the meniscus or the ligament. There is no significant traumatic history.

FINDINGS AND INTERPRETATION OF IMAGING STUDIES

The imaging algorithm started with conventional radiological studies; therefore, a two-plane x-ray (front and lateral) of both knees was requested. The left knee x-ray (**Figure 1**) did not show any abnormalities.



Figure 1. Two-plane knee x-ray, front (A) and lateral (B). No bone or soft tissue abnormality was observed.

JUAN PABLO GHISI, MD • jpgghisi@gmail.com 

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A magnetic resonance image (MRI) was later taken (Figures 2-6), in which the central finding was the presence of hyperintensity in the fluid-sensitive sequences indicative of edema in the superior and lateral area of the Hoffa's or infrapatellar fat pad (IFP). Imaging confirmed a degenerative tear in the lateral meniscus and secondary small parameniscal cysts, as well as low grade chondromalacia patellae (images not shown). Bone and ligament structures presented normal.

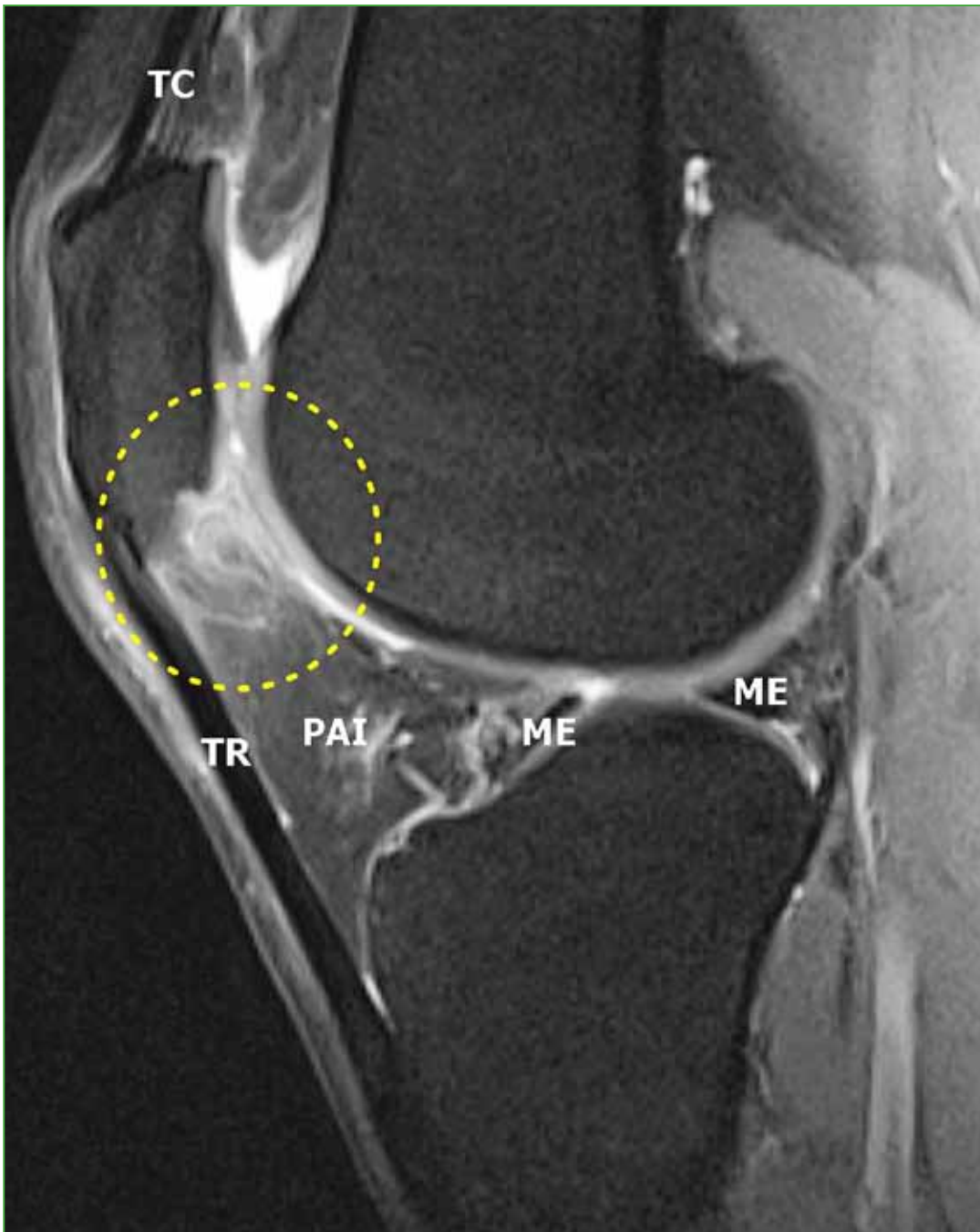


Figure 2. Magnetic resonance image, sagittal plane, with fat-suppressed proton density weighted sequence. In this lateral parasagittal section of the knee, there is a stronger signal in the superior area of the Hoffa's or infrapatellar fat pad (IFP) that shows an edema. TC = quadriceps tendon, TR = patellar tendon, ME = lateral meniscus.



Figure 3. Magnetic resonance image, sagittal plane, with fat-suppressed proton density weighted sequence, consecutive and lateral to Figure 2. The signal is observed with higher intensity towards lateral direction (*arrow*). It shows an edema between the patellar tendon (TR) and the anterior aspect of the lateral femoral condyle (CFE).



Figure 4. Magnetic resonance image, sagittal plane, with fat-suppressed proton density weighted sequence, consecutive and lateral to Figure 3. It shows persistent edema in the superior and lateral area of Hoffa's fat pad. Some fluid is observed in the deep infrapatellar bursa (*).

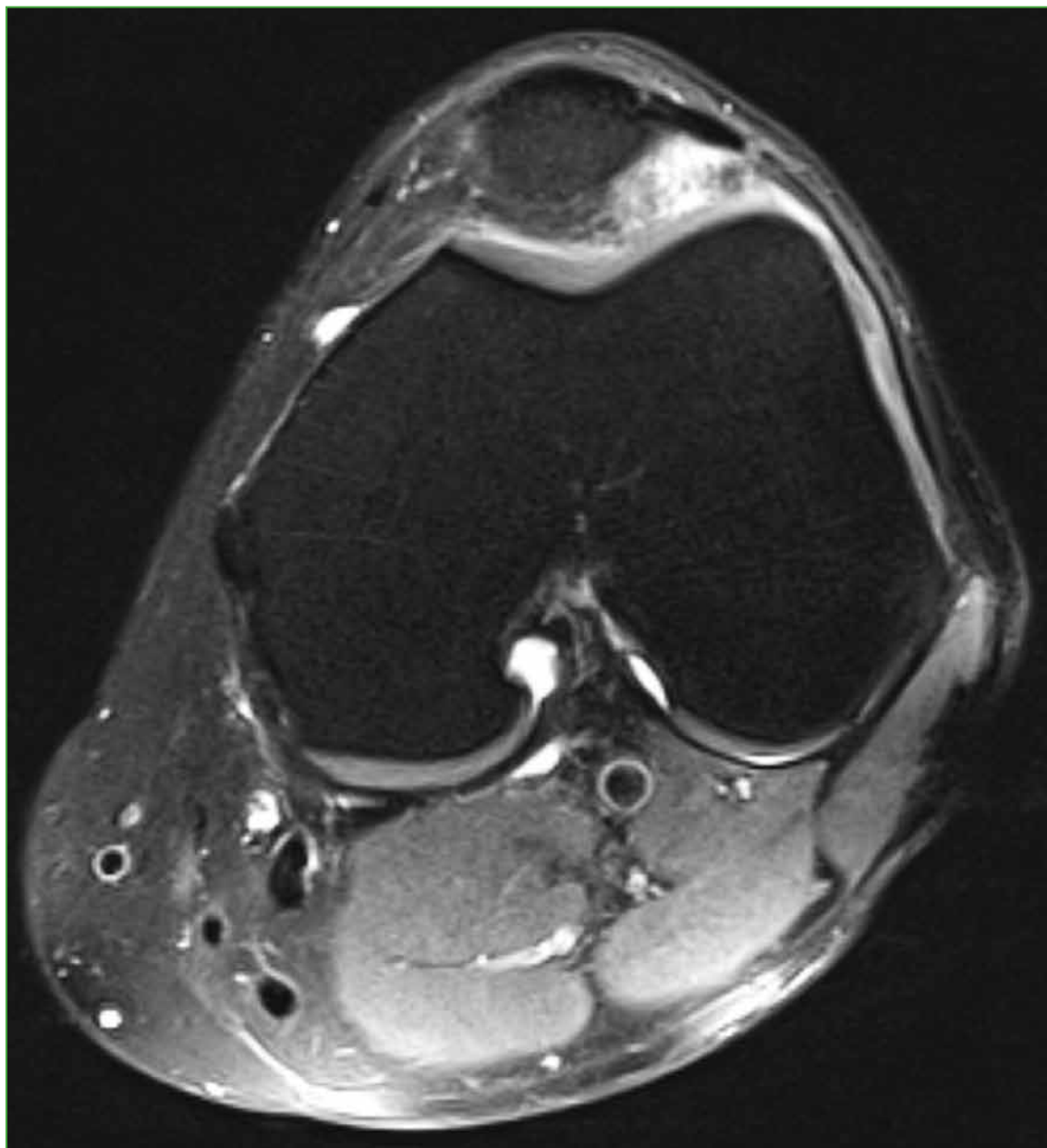


Figure 5. Magnetic resonance image, axial plane, with fat-suppressed proton density weighted sequence. The topography of the edema is clearly observed in the impingement between the patellar tendon and the inferior patellar pole with the lateral femoral condyle.

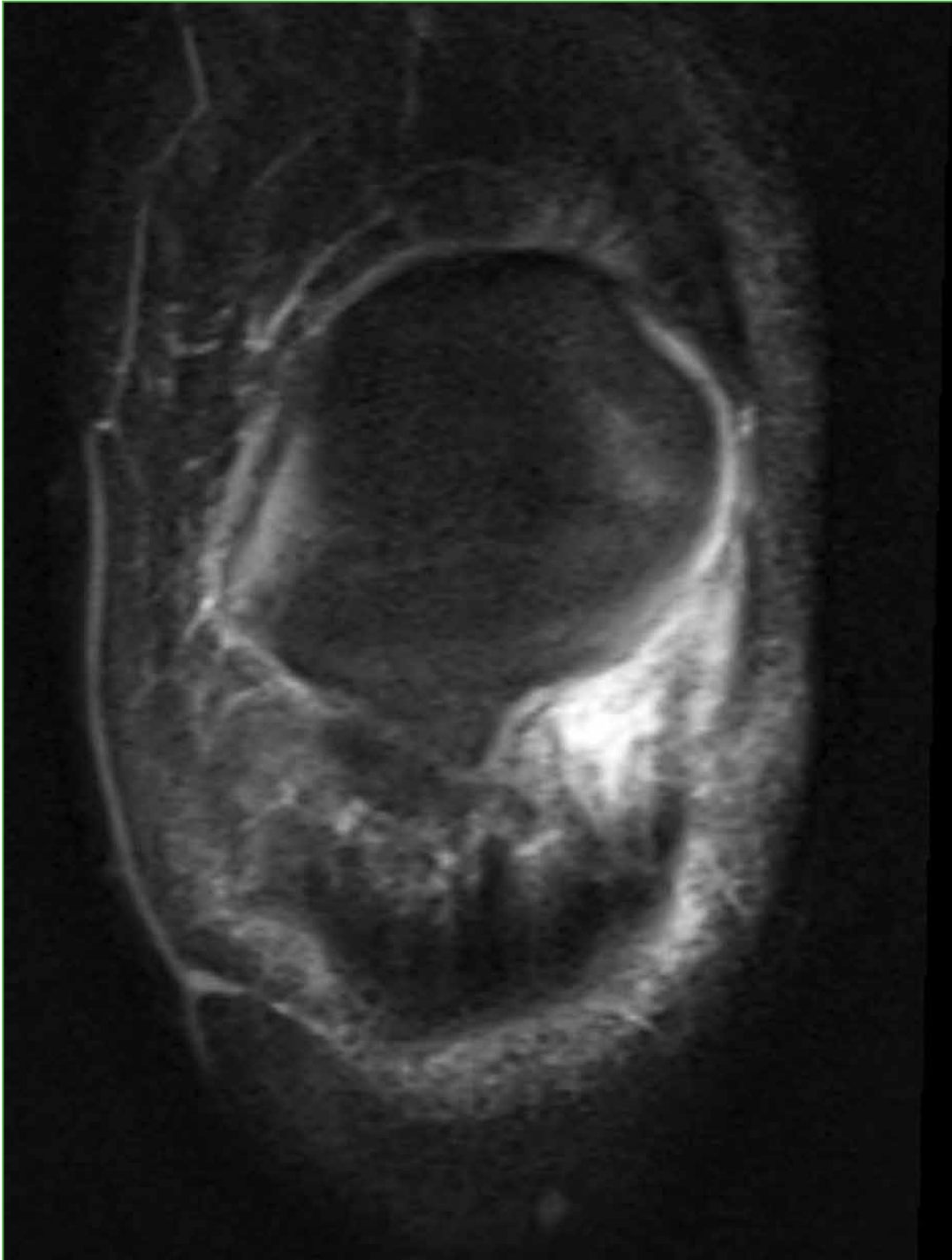


Figure 6. Magnetic resonance image, coronal plane, with fat-suppressed proton density weighted sequence. The edema is located below the inferior and lateral patellar border, and is easily accessible on physical examination by inducing tenderness.

Conflict of interest: Authors claim they do not have any conflict of interest.

M. E. Vidondo ORCID ID: <https://orcid.org/0000-0001-5515-5884>