

IOP - Imágenes

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Case

A 16 years old female ballet dancer consults for circumscribed pain in the anterior-superior border of her left iliac crest, which is linked to dancing.

Findings in and interpretation of imaging studies

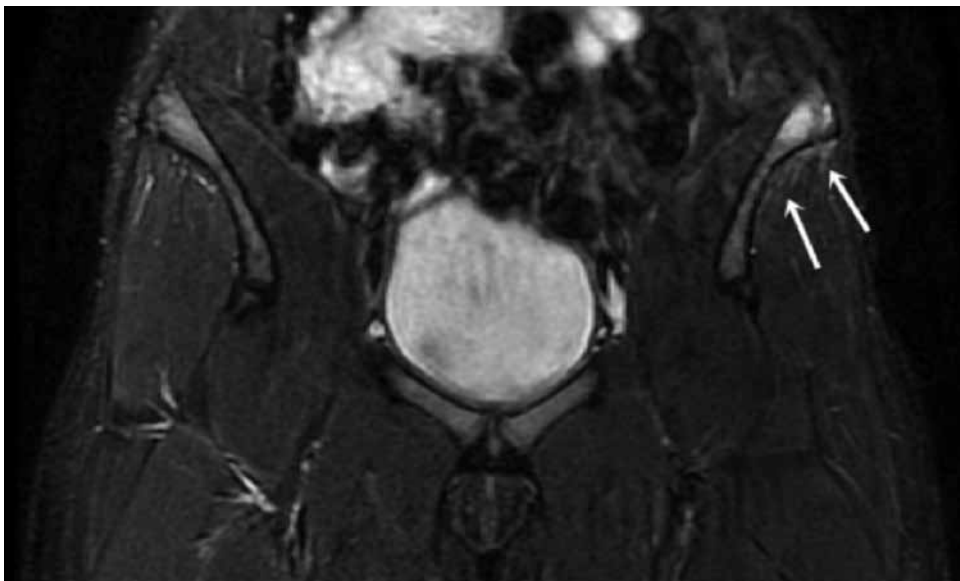
We started imaging studies with a conventional anterior-posterior pelvis X-ray (Figure 1), which did not show changes. As symptoms remained, we ordered pelvis MRI—the transverse plane using STIR sequence shows an increase in the signal (edema) in the anterior-superior area of the left iliac crest which also involves the anterior-superior iliac spine and which coincides acutely with the area of the pain (Figure 2). The coronal plane and also using STIR sequence shows a minimal inferior movement of the spinal process. It is associated with an increase in the signal (inflammatory changes) in the near soft tissues which involves the muscle fibers of the gluteus medius muscle (Figure 3). Although T1 sequences give an accurate anatomical idea, edema—in this case shown by a decrease in the signal—is not as obvious as in the fluid-sensitive sequences (Figure 4).



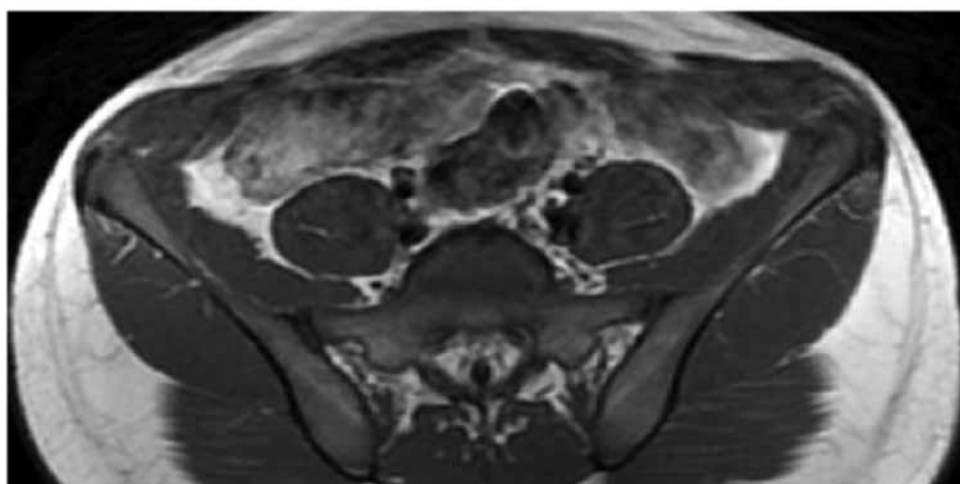
Figure 1. The anterior-posterior pelvis X-ray does not show changes. It shows that the iliac processes are not fused yet.



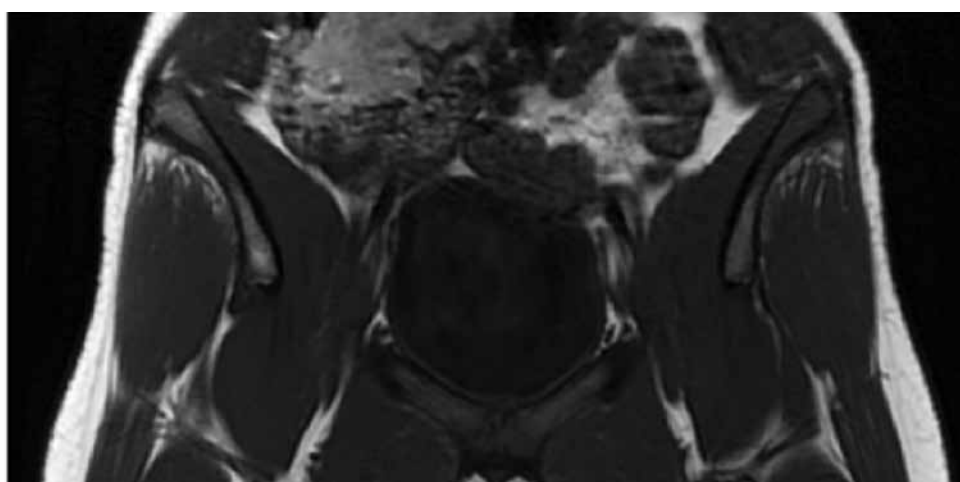
Figure 2. MRI, STIR transverse section. It shows an increase in the signal in the superior-lateral area of the left iliac crest and also in the anterior-superior iliac spine.



▲ **Figure 3.** MRI, STIR coronal section. Apart from the bone edema seen on the transverse plane, it shows edema of the near soft tissues which involves the proximal muscle fibers of the gluteus medius muscle (white arrows).



A



B

▲ **Figure 4.** MRI. **A.** Transverse section; **B.** coronal section, T1 sequence. Bone marrow edema shows as a decrease in the signal.