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ΑΡΧΕΙΑ ΕΛΛΗΝΙΚΗΣ ΙΑΤΡΙΚΗΣ 2012, 29(4):518

Medical Imaging Quiz – Case 26

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A 9-year-old girl presented to the emergency department of our hospital with acute right hip pain and a limp for 1 month. She mentioned no history of trauma. Laboratory tests were unremarkable except for a slight increase in CRP. An anteroposterior pelvis X-ray showed a focal lucent lesion with sclerotic margins in relation with the right ischiopubic ramus (fig. 1). A focused CT scan, using a 16-detector row unit was performed in order to define the nature of this focal lesion (fig. 2).

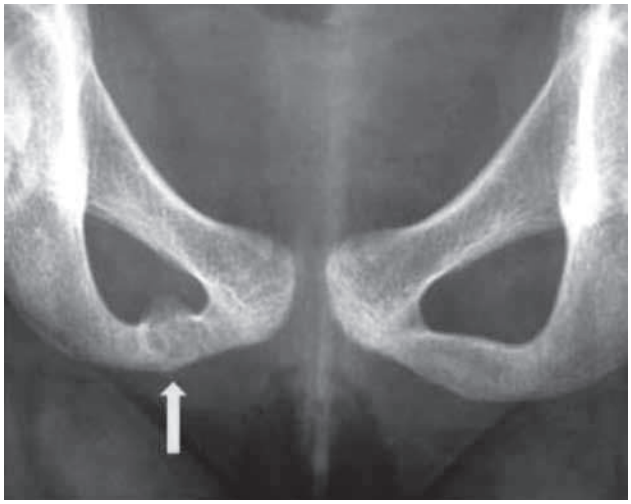

Figure 1. Anteroposterior X-ray of pelvis shows a focal lucent lesion with sclerotic margins in relation with the right ischiopubic ramus (arrow).

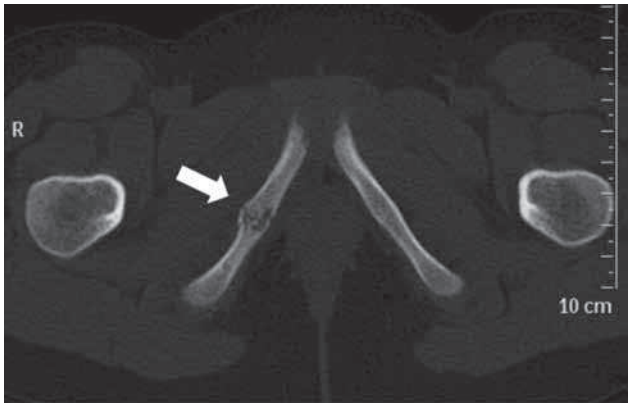

Figure 2. Axial CT scan shows delayed closure and enlargement of the right ischiopubic synchondrosis with irregular bone margins (arrow).

Comment

Ischiopubic synchondrosis (IPS) is the junction between the inferior ischial and pubic rami. IPS is principally composed of hyaline cartilage and its closure is typically completed before puberty. Whereas in early childhood the enlargement of IPSs is bilateral, in older children, is commonly unilateral. The fusion of ischial and pubic bones usually take place without any clinical symptoms; however, children may have non-specific symptoms, such as pain in the hip, groin or in the gluteal region, which results in limitation of the movement of the hip joint and limping. The radiological appearance IPS mimics stress fracture, neoplasm, osteomyelitis, or posttraumatic osteolysis. Radiologists and clinicians should be aware of asymmetrically enlarged IPS, which is a frequent normal variant among prepubertal children.

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