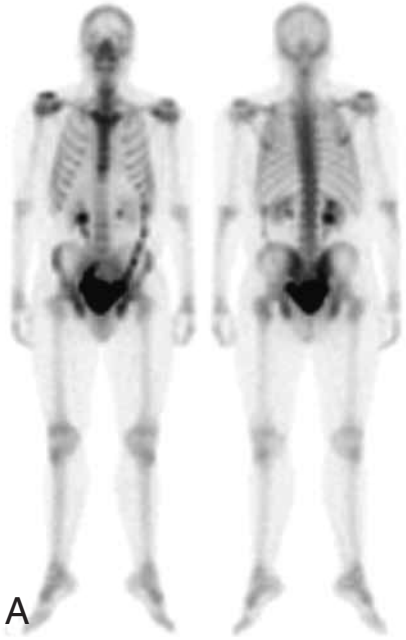
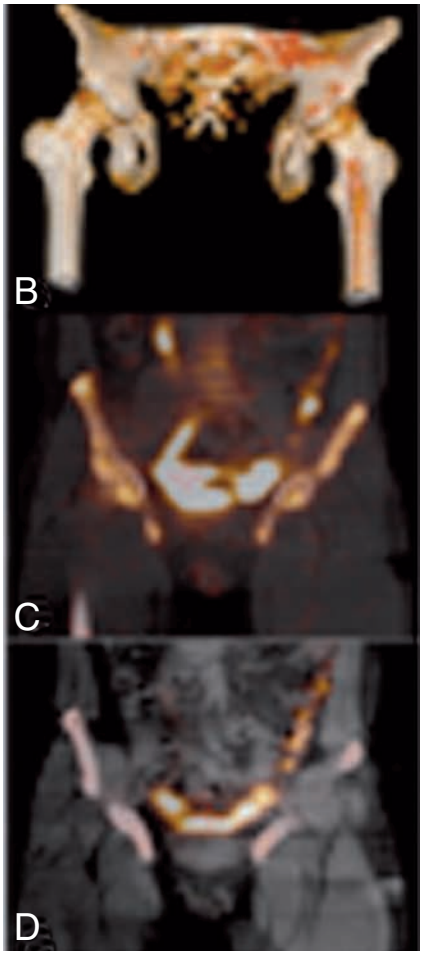
JBR–BTR, 2011, 94: 97.

IMAGES IN CLINICAL RADIOLOGY





Agenesis of the pubic symphysis detected with SPECT-CT

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The pelvis is composed of 3 paired bones (ischiac, pubic and iliac bones) and the sacrum. Any part of the pelvis can be congenitally absent, but the sacrum is the most commonly affected. The absence can be partial or complete; unilateral or bilateral and can occur in an isolated fashion or be part of a malformation syndrome.

A 99m Tc Methylene Diphosphonate (MDP) bone scan was performed in a 25-year old male because of chronic low back and pelvic pain. The patient's history revealed bladder extrophy at birth for which he underwent an ureterosigmoidostomy.

Total body and additional SPECT/CT images were acquired 3 hours after the injection of 740 MBq of 99m Tc-MDP. No pathological foci, which could explain the experienced pains, were detected. The reconstructed bladder had an irregular shape and urinary activity was seen in the left colon. No anterior pelvic bone activity was present (Fig. A). SPECT CT of the pelvis demonstrated the absence of the anterior branches of the pubic bones and pubic symphysis (Fig. B). Because of the lack of anterior pelvic stabilization, the posterior part of the pelvic floor is surcharged, which can explain the pain syndrome. Fusion images also showed the urinary flow to the reconstructed bladder and the intestinal excretion (Fig. C). A urinary escape route explains the activity in the left colon (Fig. D).

Hypoplasia of the ischiopubic region is a rare congenital anomaly; few cases are reported in literature (1). This condition is often associated with genitourinary and anal malformations. A plain radiograph of the pelvis can detect most of these abnormalities and lead to the recognition of an unsuspected disorder.

Reference

1. Ischiopubic hypoplasia: a rare constituent of congenital syndromes. *Acta Orthop Belg*, 2003, 69: 29-34.

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