WHEN THE BODY SAYS 'STOP!': ISCHIOPUBIC RAMUS STRESS FRACTURE IN A RUNNER

Adriana Correia, Ines Camarinha, Catarina Afonso, Ana Rita Pessoa, Fábio Pinho, Diogo Rodrigues

ULS São José, Portugal
e-mail: adrianapscorreia313@gmail.com

Background

Stress fractures occur when bone is subjected to repeated mechanical stress that results in microscopic fractures. It can be classified as fatigue reaction stress fracture, result from repetitive and excessive strain placed on structurally normal bone, or insufficiency reaction stress fractures, when normal stress and straining are applied to a bone where bone formation is impaired, as seen in ostheoporosis. Pelvic stress fractures are a rare cause of pain in the inguinal/gluteal region, leading to the underdiagnosis of this condition. In athletes, stress fractures account for 2% of reported injuries, with a higher incidence observed in long-distance runners and triathletes.

Case report

A 42-year-old healthy female with no relevant medical history, who is a regular long-distance runner, presented with pain in the left gluteal region during an athletic competition, with no associated trauma. Initially, the pain was mild but progressively worsened. The episode coincided with her return to sports after a period of inactivity. Initial imaging with hip radiography showed no abnormalities. After a series of unsuccessful physical therapy sessions, she underwent MRI, which revealed a fracture of the left ischiopubic ramus.

Conclusion

This case highlights risk factors for stress fractures, including female sex and rapid return to sports after inactivity. Diagnosis was delayed, as these fractures may not be detected in the acute phase with simple radiographs, with 60-70% yielding negative results. Early imaging signs include bone marrow edema on MRI and increased activity on bone scintigraphy. The absence of radiographic evidence in the acute phase can lead to underdiagnosis. Bone scintigraphy, CT, or MRI may aid early diagnosis. Treatment involves rest (6-10 weeks), with a risk of re-fracture if not adhered to. Progression and return to play should depend on patient symptoms.

Keywords: Stress fracture; ischiopubic ramus fracture;