ISCHIAL STRESS FRACTURE

Introduction

Stress fractures are common overuse injuries. It is a continuum of bone injury from radiologically occult, yet microscopic, trabecular injury to frank fracture. These fractures are frequently seen in athletes and military recruits. 2 types of stress fractures are seen: A fracture within normal mineralised bone is termed fatigue fracture (usually as a result of abnormal load or stress; whereas a fracture within abnormal bone is termed insufficiency fractures (may occur with an underlying condition such as osteoporosis, radiotherapy, corticosteroid therapy or rheumatoid arthritis). Pain is the presenting symptom.

Case Report

A professional soccer player presented with low-grade right sided buttock pain worsening over 4 months. There was tenderness with palpation of hamstring insertion. So that, his clinician wanted MRI examination to rule out hamstring pathology.

MRI revealed a linear hypointense signal in cranial part of the ischial bone in both T1 and T2-weighted images (Figure 1-2). There is also large surrounding T2-hyperintense signal, consistent with perilesional bone marrow edema (Figure-1). These findings suggested a probability of stress fracture. Further examination with multislice CT, clearly delineated stress fracture and surrounding sclerosis (Figure-3).

Long-lasting pain in pelvic region should be evaluated with MRI. Radiologist should be aware of any bone marrow edema of pelvic bones in athletes, as if it may be a sign of stress fracture.

References

