The patient was a 19-year-old woman who recently completed a military basic training program. She was evaluated by a physical therapist in a direct-access capacity for a chief complaint of anterior right hip pain that limited her ability to run. Although there was no history of traumatic injury, her hip pain was insidious in onset and had gradually worsened over the previous 2 weeks. Prior to enlisting in the military, the patient had led a sedentary lifestyle. However, due to the requirements of her military training program, her activity level had gradually increased to running 24 to 32 km/wk over a 4-week period.

Visual observation revealed that gait velocity was slowed and that stance phase for the right lower extremity was decreased. Right hip active and passive range of motion was painful and limited, and manual muscle testing of the right hip musculature revealed weakness and extreme pain.

Due to concern for a femoral neck stress fracture, the patient was instructed in a non-weight-bearing gait with axillary crutches. The physical therapist also ordered radiographs of the pelvis and bilateral hips, which were initially interpreted as normal (FIGURE 1). However, due to the limited sensitivity of radiographs, magnetic resonance imaging of the right hip was obtained, which revealed a stress fracture of the right distal femoral neck (FIGURE 2). The patient was referred to an orthopaedic surgeon and subsequently underwent open reduction internal fixation of the right hip. At 5 months following surgery and after completion of a comprehensive rehabilitation program, the patient returned to full participation in military training activities.

Femoral Neck Stress Fracture

MICHAEL KONETSKY, PT, DPT, Department of Surgery, Evans Army Community Hospital, Fort Carson, CO.
JOSEPH MILLER, PT, DSc, OCS, SCS, CSCS, Department of Surgery, Evans Army Community Hospital, Fort Carson, CO.
COURTNEY TRIPP, DO, Department of Radiology, Evans Army Community Hospital, Fort Carson, CO.


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