Exercise-related longitudinal tibial stress fracture in a young person

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A 22-year-old man presented to the Nuclear Medicine Clinic for evaluation of distal right tibial pain. The patient reported recently beginning a rigorous exercise program involving lower extremity impact temporally related to the onset and worsening of the pain. The physical examination was remarkable for significant tenderness to palpation of the distal one-third of his right tibia. The presumptive diagnosis was a stress fracture. Recent roentgenograms of the right tibia were not available for review but were reportedly normal. Scintigraphy, in combination with computed tomography, revealed an unusual type of stress fracture (particularly in a young person and in relation to exercise)—a longitudinal stress fracture.

Key words: bone scintigraphy, longitudinal, tibia, stress fracture