Discussion

1. Dr. Sommer Hammoud: Given the practical aspects of cost, what are your general guidelines for when to obtain a bone scan or an MRI?

Authors' answer: We recommend first obtaining X-rays of the affected area. If stress fracture is visible on X-ray then obtaining more advanced imaging is generally not needed with the exception of certain high-risk fracture sites (i.e., femoral neck, medial malleolus, fifth metatarsal) where surgery may be considered. If X-rays are negative for stress injury we would recommend obtaining an MRI for confirming and grading the extent of injury for athletes who are in season and are at risk for progression of fracture, for athletes where an immediate diagnosis is needed to help determine ability to continue competition, and to provide more detailed prognostic information for timeline on return to play. We prefer MRI to bone scan as a first line given its higher sensitivity and specificity in diagnosing bone stress injuries.

2. Dr. Sommer Hammoud: What should prompt a treating physician to involve other specialists (Nutritionist? Endocrinologist? Psychologist?) in the care of the female athlete with a bone stress injury?

Authors' answer: The treating orthopaedic physician should have a low threshold to involve other specialists in the care of the female athlete with a bone stress injury. A multidisciplinary approach including the involvement of a nutritionist, endocrinologist, athletic trainer, and possible psychologist is indicated in athletes that display symptoms of the female athlete triad, recurrent bone stress injuries, and those at high-risk for recurrence given activity level.