Pubic Symphysis Sprain in a Division III Collegiate Men’s Basketball Athlete
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Background: A 21-year old male collegiate basketball athlete presented with pelvic pain after demonstrating a hip rotation mechanism while participating in a game. Athlete jumped for a lay-up and on his way down had feet taken out from under him causing right innominate to strike floor before left. On-court evaluation revealed no pelvic fracture or lumbosacral involvement; no history of injury to the lower extremity. Athlete complained of sharp pain (8/10) alongside the posterior aspect of lower back and pain over the right ischium. Palpations of the iliac crests, spinous processes L4- S2 and PSIS’s were painfree. No palpable deformity was present. No noises or sensations were reported. The certified athletic trainer removed athlete from court with walking assistance to athletic training facility. Off-court evaluation revealed pain described as “achy” as 7/10 (versus sharp) during palpation of the right ischium; no other structures elicited pain when palpated. Reevaluation 24 hours post-injury indicated new present clinical symptoms. Athlete complained of deep anteriomedial pelvic “achy” pain (8/10) with no posterior pain. Severe pain was present over right ASIS, right AIIS, right inguinal ligament and bilateral pubic bones. Based on clinical findings, athlete was given immediate referral to the emergency room for diagnostic testing and further evaluation due to a lack of range of motion and increased pain scale. **Differential Diagnosis:** Ischial Contusion, Inguinal Ligament Sprain, Adductor Insertion Strain, Right Innominate Up-Slip, Osteitis Pubis, Athletic Pubalgia, Pubic Symphysis Sprain. **treatment:** The emergency room physician ordered a plain film radiograph. Based on evaluation and diagnostic findings, athlete was diagnosed with a contusion to the pubic symphysis and pubic symphysis sprain. Following this diagnosis, certain pertinent evaluation findings were retrospectively identified. Several predisposing factors (excessive lumbar lordosis, an anterior pelvic tilt, a decreased and differential Q-angle bilaterally) were noted which may have contributed to his mechanism of injury. Discontinuation of physical activity was advised; athlete limited to activities of daily living for three days. Athlete followed conservative rehabilitation protocol designed by the team physician and athletic trainer. The rehabilitation phase started day three post-injury and consisted of preheating the area using a moist hot pack, followed by straight-leg raises bilaterally to reduce athlete’s apprehensiveness toward and engage in AROM, single-leg stance balance training (bilaterally), progressive resistance exercises in hip flexion, extension, abduction and adduction using a theraband. Cryotherapy post-rehabilitation. Days seven through ten post-injury consisted of functional testing including both cardiovascular exercise (resistance bike: level 5, and light jogging/ running on the treadmill: 10-20 minutes, 5.5-7.4 mph) and functional activity protocol (28-meter: sprints, backwards running, karaoke/ grapevine (both directions), powerskips, side-shuffles (both directions) on the basketball court). Athlete was cleared for full return-to-play status ten days post-injury, with the condition of activity ceasing if pain presented. Rehabilitation continued once athlete returned to participation. **Uniqueness:** Injury to the pubic symphysis is relatively uncommon in athletics due to the anatomy of the joint as well as the mechanisms required for structural damage to occur. Consequently, acute injuries to the pubic symphysis are more susceptible to being overlooked by Athletic Trainers. A lack of research regarding this injury contributes to the motive for misdiagnosis; this case report will serve as a guide to ensure the proper diagnosis in the next case. **Conclusions:** Although pubic symphysis sprains occur infrequently, acute injuries to the pubic symphysis should be treated with caution and must not be overlooked. It is imperative that Athletic Trainers be alert to clinical evaluation findings that may point to this diagnosis. Delayed recognition and diagnosis may lead to increased functional limitations and prolonged pain. Timely diagnosis and treatment are essential to ensure speedy recovery. **Word Count:** 597