

Orthopedic Evidence Annotation – Hip

For elite dancers with snapping hip syndrome is real-time ultrasound and physical examination compared to self reported symptoms more accurate in diagnosing the mechanisms of the syndrome?

Paul PWW, Raza RAA, Cassidy JJ, Robert RKBB. Clinical Examination and Ultrasound of Self-Reported Snapping Hip Syndrome in Elite Ballet Dancers. *Am J Sports Med.* 2007;35:118-126.

This study investigated dancers at a ballet company and a professional ballet school who complained of snapping hip syndrome. To be included in the study, the dancers were required to reproduce the snapping. First each participant was given two physical examinations; one by a physician and the other by a PT. The patients were instructed not to inform the clinicians if their hips were symptomatic or not. The clinicians were blinded to each other's findings and if they contradicted each other, a third clinician performed another exam. The patients received real-time ultrasound from a radiologist, who diagnosed snapping hip syndrome based on the US results. The clinical examination resulted in a 60% diagnosis of the dancers in the study who self reported a snapping hip. The study concluded that of these, the ITB can be "readily diagnosed" as the cause of snapping hip syndrome. The ultrasound examinations resulted in only two-thirds of dancers with snapping hips, even with snapping palpable to the radiologist. The study concluded that the dancers not diagnosed during ultrasound exam had intra-articular causes of their snapping.

The level of evidence for this study according to the AAOS scale is level III. This study is graded at level III because there is no consistent gold standard used to compare with the diagnostic tests examined.

Bottom line: Many elite dancers experience snapping hips, with or without pain. The most accurate diagnostic tool for snapping hip syndrome is the patient's history, even when compared with physical examination and ultrasound.

This is clinically relevant as I treat many athletes who complain of snapping hips, some of whom are cheerleaders/ dancers. This study emphasizes the importance of a good history and the value of patient symptoms. Often clinicians tend to focus on diagnostic tests which produce some tangible result. As this study demonstrated, patient reported symptoms are generally much more significant in properly diagnosing a condition than many physical diagnostic tests.

This study is also valuable in educating patients that they are the key to diagnosing their conditions. This will especially help with those athletes who try to push through pain and wait for some other physical sign before seeking medical attention.

Is the diagnostic test available, affordable, accurate, and precise in your setting? Yes

Can you generate a clinically sensible estimate of your patient's pre-test probability (from practice data, from personal experience, from the report itself, or from clinical speculation) yes

Will the resulting post-test probabilities affect your management and help your patient? (Could it move you across a test-treatment threshold?; Would your patient be a willing partner in carrying it out?) yes

Would the consequences of the test help your patient? The tests were not very accurate, so probably not