



AB123. SOH22ABS172. A comparison magnetic resonance imaging (MRI) of and in wrist arthroscopy the diagnosis of Triangular Fibrocartilaginous Complex (TFCC) tears: an Irish perspective

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Background: The Triangular Fibrocartilaginous Complex (TFCC) is a load bearing structure that functions as a stabilizer of the ulnar aspect of the wrist and supports the distal radio-ulnar joint (DRUJ). TFCC injuries are common and often occur post trauma. Arthroscopy is the gold standard of diagnosis however many investigate patients with magnetic resonance imaging (MRI) to support a clinical suspicion. Sensitivity for MRI varies widely with recent systematic review reporting MRI sensitivity ranging from 44–93%. TFCC tears associated with distal radius fractures range from 38–78%. Ireland sees approximately 2,475 operatively treated distal radius fractures per year. We can infer that a certain number of these patients have suffered concurrent trauma to their TFCC and as such may present with wrist pain. The aim of this study is to compare MRI and arthroscopy in diagnosing TFCC tears in an Irish patient cohort.

Methods: All patients must have had an MRI of the wrist. All patients must have had a clinical suspicion of a TFCC tear. All patients must have had an arthroscopy which specifically commented on the condition of the TFCC.

Results: A total of 42 patients were eligible for this study. Twenty-four females and 18 males, mean age 44.6. Eighty-eight percent patients suffered from chronic wrist pain,

43% reported ulnar-sided wrist pain. Fifty-nine percent of the overall cohort had a traumatic history of fall, injury or fracture to the ipsilateral wrist. Sensitivity of MRI when compared to wrist arthroscopy was 50% with a specificity of 83.33% and positive predictive value (PPV) of 88% while negative predictive value (NPV) was 40%.

Conclusions: In patients with clinical suspicion of a TFCC tear, consideration should be made to proceed straight to arthroscopy as both a diagnostic and potentially therapeutic intervention.

Keywords: Arthroscopy; diagnostics; hand and wrist surgery; Triangular Fibrocartilaginous Complex (TFCC); upper limb

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Footnote

Conflicts of Interest: The authors have no conflicts of interest to declare.

Ethical Statement: The authors are accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved.

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