

Introduction and aim of the work

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Magnetic resonance imaging (MRI) is a proven, established imaging modality for the detection, evaluation, staging, and follow-up of disorders of the wrist. Properly performed and interpreted, MRI not only contributes to diagnosis but also serves as an important guide to treatment planning and prognosis (*Nikken et al., 2011*).

Newly developed, higher-field-strength magnets offer additional benefits, including increased signal-to-noise ratio (SNR), enhanced T2* contrast, increased chemical shift resolution, and better overall diagnostic performance, which is crucial for musculoskeletal applications, especially for the imaging of small joints, the median and ulnar nerves, and radiocarpal and intercarpal cartilage (*Saupe et al., 2010*).

MRI has been advocated for patients with chronic wrist pain because it provides a global examination of both the osseous and soft-tissue structures. It may be diagnostic in patients with triangular fibrocartilage complex (TFCC) and interosseous ligament tears, occult fractures, avascular necrosis (AVN), and miscellaneous other abnormalities. It is also recommended for evaluating tendon pathology, including tendinopathy, tenosynovitis, and rupture. Currently, preoperative MRI is recommended by some authors to direct appropriate operative intervention or non operative treatment. Contrast-enhanced and dynamic MRI has been suggested in specific situations such as detecting erosions and their progression in rheumatoid arthritis (*Zanetti M et al., 2007*).

The aim of this work is to simplify the complex anatomy of the wrist joint and to highlight a proper approach for reading of the MRI study of patients suffering from painful wrists to determine the underlying etiological factors.