

Summary

Our study was conducted on 25 patient of wrist pain, 14 female and 11 male. Their age ranges from 13-46 years old (mean 31years and 6 months). The study was conducted from January 2012 to February 2013. The study was conducted in El Fayoum university hospital, El Fayoum, Egypt.

The entire patient had MRI examination prior to the arthroscopic procedure. The interval between MRI and arthorscopy ranges from 1 to 24 months. The MRI was reported by two musculoskeletal radiologists. The images were reviewed to determine if the following were present or not: scapholunate ligament tears, lunatotriquetral ligament tears, TFCC tears, articular cartilage pathology, or synovial pathology. All of these patients underwent wrist arthroscopy. Positive findings were described. On completion, MR images were correlated with arthroscopy results.

Sensitivity and specificity test for each pathological category were done. The level $P \leq 0.05$ was considered the cut-off value for significance.

The comparison between MRI and wrist arthroscopy in examination of wrist joint articular cartilage revealed that there is significant difference between them (P- value 0, 01) and

reported that the sensitivity and specificity test for MRI in articular cartilage diseases (80%) and (90%) respectively and accuracy 85%.

The comparison between the results of MRI and wrist arthroscopy in examination of wrist ligament pathology we reported that there is no significant difference between them (P- value 0,07) and reported that the sensitivity and specificity test for MRI in ligament pathology 62.5% and 64.7% respectively and accuracy 63.6%.

The comparison between the results of MRI and wrist arthroscopy in examination of wrist joint synovium revealed that there is no significant difference between them (P- value 0, 3) with Sensitivity and specificity test 85.7% and 33.3% and accuracy 59.5%.

We believe that wrist arthroscopy is still the gold standard in the diagnosis and treatment of a variety of wrist conditions. Wrist arthroscopy is a relatively safe and valuable procedure. We reported a low postoperative complication rate.

But it requires high technical demand and skills. Its clinical applications continue to expand, with more complex reparative, reconstructive, and salvage procedures now being performed.

Magnetic resonance imaging has advantages that it is noninvasive and no ionizing radiation is involved. But in comparison with wrist arthroscopy it shows high sensitivity and specificity in detection of articular wrist cartilage, moderate sensitivity and specificity in detection of intrinsic wrist ligament tears and high sensitivity but low specificity in detection of wrist synovial lesions.