

MRI VERSUS ULTRASOUND FINDINGS IN CLINICALLY DIAGNOSED EARLY RHEUMATOID ARTHRITIS

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Article Received on 14/06/2022

Article Revised on 04/07/2022

Article Accepted on 25/07/2022

INTRODUCTION

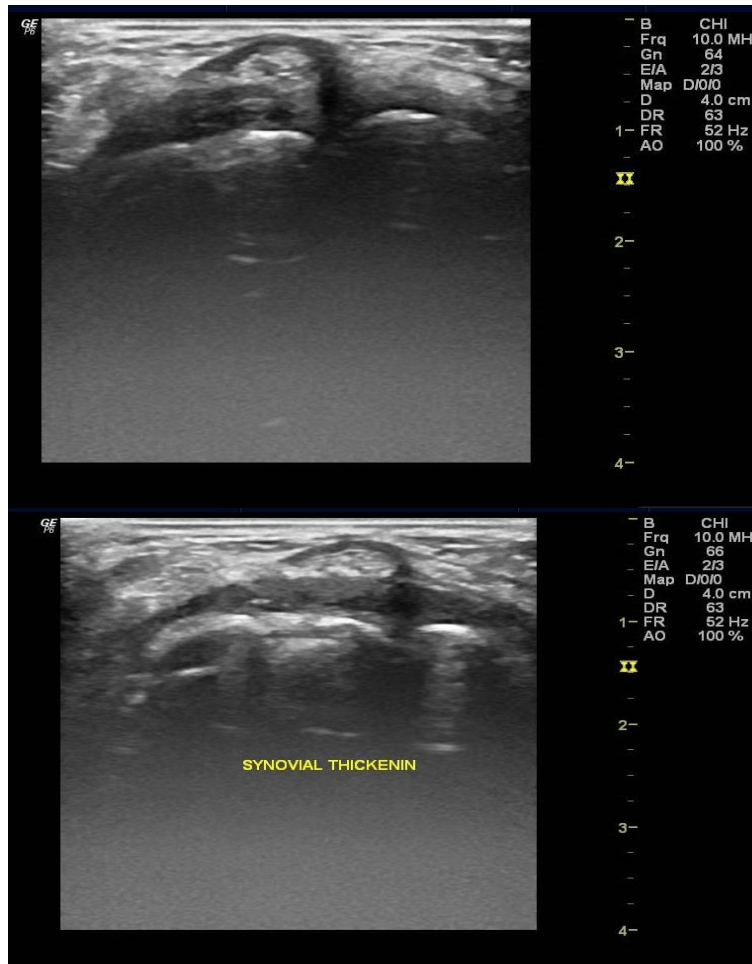
Rheumatoid arthritis (RA) is a systemic autoimmune disease affecting mainly the small joints of the hands and feet. The disease is characterized by symmetric joint inflammation and destruction that often involves the small joints of hand and feet, with progressive destruction, deformity and disability of the joints.

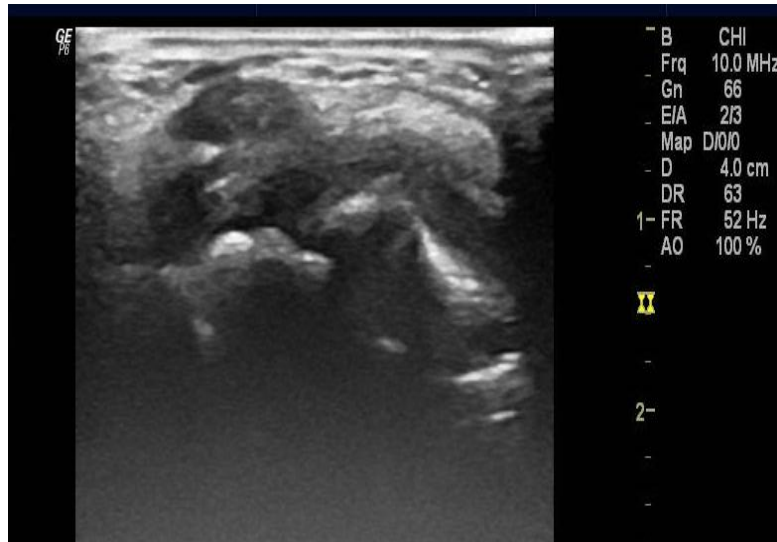
RELAVANT HISTORY

We present case of 43 years old patient who was clinically diagnosed with Early Rheumatoid Arthritis.

IMAGING FINDINGS

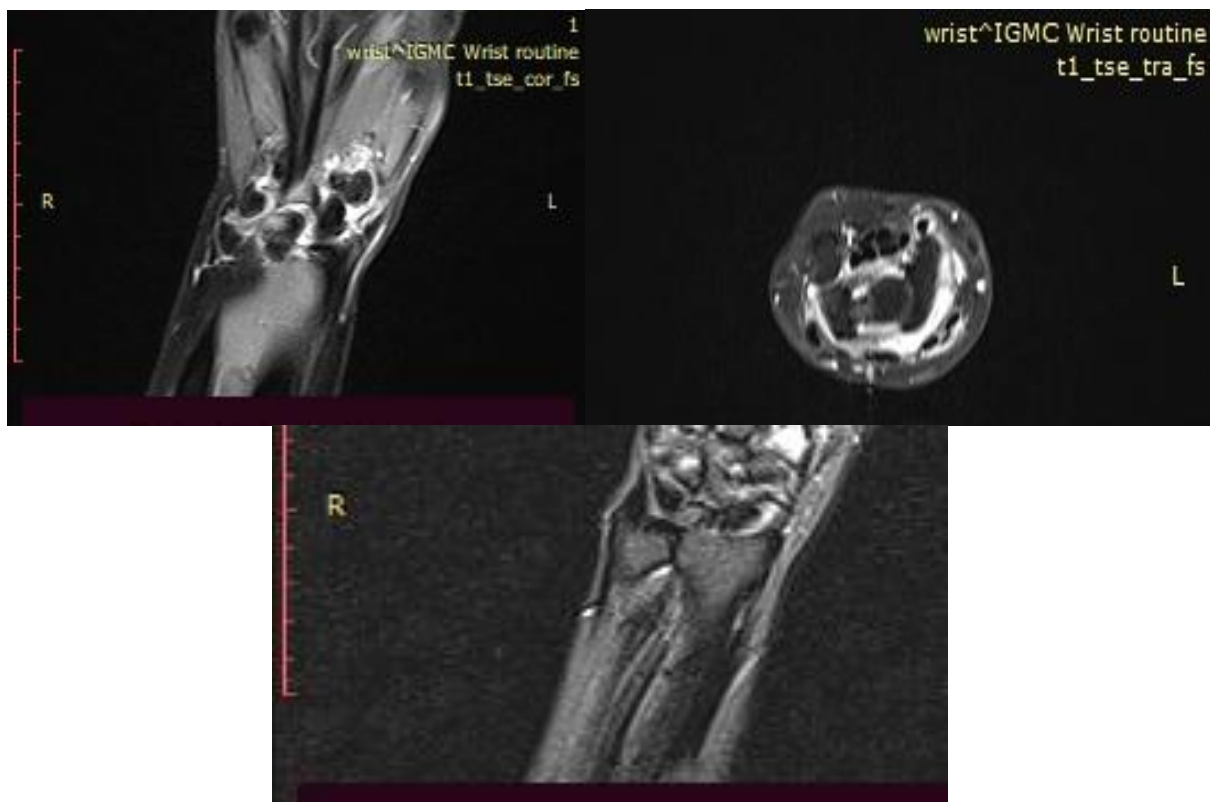
ULTRASOUND: Effusion and synovial thickening with minimal vascularity was along extensor compartment and flexor polllis longus. Synovial thickening was seen along radioulnar joint, intercarpal bones and carpometacarpal joints.





MRI: STIR hyperintensity showing post contrast enhancement was seen along all tendons of extensor compartment and flexor pollicis longus suggestive of tenosynovitis. Enhancing synovial thickening was seen

involving wrist joint , intercarpal joint and carpometacarpal joint. T2/STIR hyperintensity was seen involving base of 1st, 2nd and 4th metacarpal and carpal bones suggestive of marrow oedema.



RESULT

We were able to diagnose early Rheumatoid Arthritis features on Ultrasound and MRI.

DISCUSSION

Early detection of Rheumatoid Arthritis is a challenging filed, however various modalities cam help to diagnose early Rheumatoid Arthritis before the onset onset of irreversible changes like joint destruction and deformities in the later stage. Ultrasound can detect

findings of Early Rheumatoid Arthritis and can be used as modality for follow up scan of Early Rheumatoid Arthritis. MRI is an expensive modality , however is superior to Ultrasound in diagnosis of Early Rheumatoid Arthritis.

CONCLUSION

On ultrasound tenosynovitis with joint effusion was present. MRI enhancing synovial thickening along joints

with tenosynovitis and marrow oedema was seen –
Features of inflammatory Early Rheumatoid Arthritis.

REFERENCE

1. Aletaha D, Neogi T, Silman AJ. 2010 Rheumatoid arthritis classification criteria: an American College of Rheumatology/ European League Against Rheumatism collaborative initiative. *Ann Rheum Dis*, 2010; 1; 69(10): 1892-6.