



## ▼ POST GRADUATES ABSTRACTS

### PG - 53 : COMPARISON OF DIAGNOSTIC ACCURACY OF HIGH RESOLUTION ULTRASONOGRAPHY WITH MAGNETIC RESONANCE IMAGING IN DETECTING MUSCULOTENDINOUS PATHOLOGIES OF THE SHOULDER JOINT

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**Aim:** To assess the role of ultrasound (US) in assessing rotator cuff (RC) tears and to enumerate the associated findings.

**Materials and methods:** 40 consecutive patients who were referred to department of Radiology for MRI shoulder with suspected musculotendinous pathology, at our institute were prospectively included in the study. All the patients underwent an initial MRI examination, followed by US which was performed by an examiner who was blinded to the MRI results. According to the findings obtained in US and MRI, the tendons of supraspinatus, infraspinatus and subscapularis were classified into full thickness tears, partial-thickness tears, or intact. Associated findings like bursal fluid and joint effusion were also recorded.

**Results:** Diagnostic accuracy of US for full-thickness RC tears was high with sensitivity and specificity of 100% & 96.77% respectively. For partial RC tears, US showed an overall sensitivity and specificity of 71.43% & 92.31% and for tendinopathy it was 88.24% & 78.26% respectively. There was significant agreement between US and MRI in detecting RC pathology with a p value of <0.001.

**Conclusion:** US can be used for the initial detection of RC tears. MRI can be reserved for cases when the US results are inconclusive or when sonographically inaccessible areas such as labrum or deep parts of ligaments are to be evaluated.