

Is there a link between shoulder pain, shoulder capsule width, and rotator cuff (RTC) pathology?

1 Introduction

2.1 Background:

Shoulder stability is dependent on active (RTC) and passive (capsule) stabilizers', pathology of one of them must affect the other. Aside from secondary adhesive capsulitis there is a paucity of studies investigating the pathogenic relationship between these structures and shoulder pain.



2.2 Aims & objective:

- does capsule width correlate with reported pain?
- Are capsular widths and rotator cuff tears (RTC) linked?

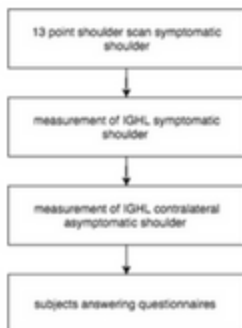
2 Method

2.1 Design:

Observational cross-sectional study

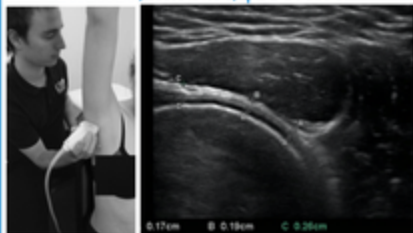
2.2 Participants: were recruited from the musculoskeletal ultrasound department of the European School of Osteopathy (ESO) clinic and ESO students, who met the inclusion and exclusion criteria

2.3 Procedure:



2.4 Outcome measure:

- a) Inferior glenohumeral ligament width (IGHL).
- measure in axial plane
 - Shoulder in maximal abduction with neutral rotation
 - 3 measurement taken: anterior, middle, posterior



b) Oxford shoulder score (OSS) & Shoulder pain and disability index (SPADI)

c) 13 point scanning protocol for rotator cuff pathology

2.5 Analytical methods:

all the data were analysed for: correlation and significance

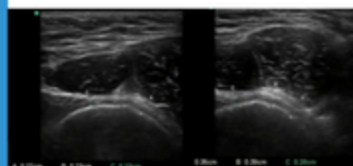
Groups compared:

- Symptomatic vs contralateral control
- Known RTC tear vs no RTC tear but known RTC pathology

3 Results



statistical significance difference between IGHL in the symptomatic group compared with the control group ($p=0.02$)



control - symptomatic

no statistical difference was found between the group with RTC tear and the group with no RTC tear but RTC pathology ($p=0.19$).

4 Conclusion

This study support the idea that there is a possible link between shoulder pain, IGHL width and RTC pathology. Further research could give insight into the predictive value of simple ultrasound metric, diagnostically aiding, the primary assessment of the 'problem shoulder'.