Local causes of painful shoulder joint: Assessment by high resolution ultrasonography and MRI

Thesis

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List of abbreviations

AC	Acromioclavicular
ACJ	Acromioclavicular joint
ALPSA	Anterior labral periosteal sleeve avulsion
AVN	Avascular necrosis
C	Cervical nerve
CDI	Color Doppler imaging
DM	Diabetes mellitus
FOV	Field of view
FS	Frozen shoulder
GH	Glenohumeral joint
GLAD	Glenolabral articular disruption
IST	Infraspinatous tendon
LHB	Long head of biceps
LHBT	Long head of biceps tenosynovitis
MRI	Magnetic resonance imaging

MRS	Magnetic resonance spectroscopy
PD	Power Doppler
PMR	Polymyalgia rheumatic
RC	Rotator cuff muscles
SLAP	Superior labral lesion
SI	Signal intensity
SS	Supraspinatous tendon
T	Thoracic nerve
US	Ultrasound

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Aim of the work

Introduction

The shoulder joint is a unique joint with the greatest range of motion, which is facilitated by a shallow synovial joint strengthened by rotator cuff muscles and tendons, together with glenohumeral ligaments and labrum. This complex anatomy makes it more vulnerable to certain sports related injuries in addition to degenerative and inflammatory joint disease ***(Gafoor et al, 2013).***

Hence, shoulder pain is a common and often disabling complaint. It is the third most common musculoskeletal reason for attending general practitioner after back and neck problems**.** In the community, the estimated prevalence of shoulder pain is between 16 and 26% ***(Brittet et al, 2009).***

Ultrasound examination and magnetic resonance imaging have been reported as useful diagnostic tools in secondary care and may increase the specificity of diagnosis ***(Ostor et al, 2004).***

Since its introduction in the 1980s, MRI has revolutionized cross sectional imaging of the musculoskeletal system and has become the most widely used technique for a wide variety of pathologic conditions. However, another musculoskeletal imaging technique was quietly on the rise—namely, sonography. Rapid improvements in technology have made sonography an important complementary tool for musculoskeletal imaging, and there is now a large body of literature documenting the effectiveness of musculoskeletal sonography ***(Nazarian, 2008).***