ROLE OF ULTRASOUND IMAGING IN DIAGNOSIS OF ROTATOR CUFF LESIONS OF THE SHOULDER JOINT

Thesis
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for Master Degree in Physical Medicine and Rehabilitation

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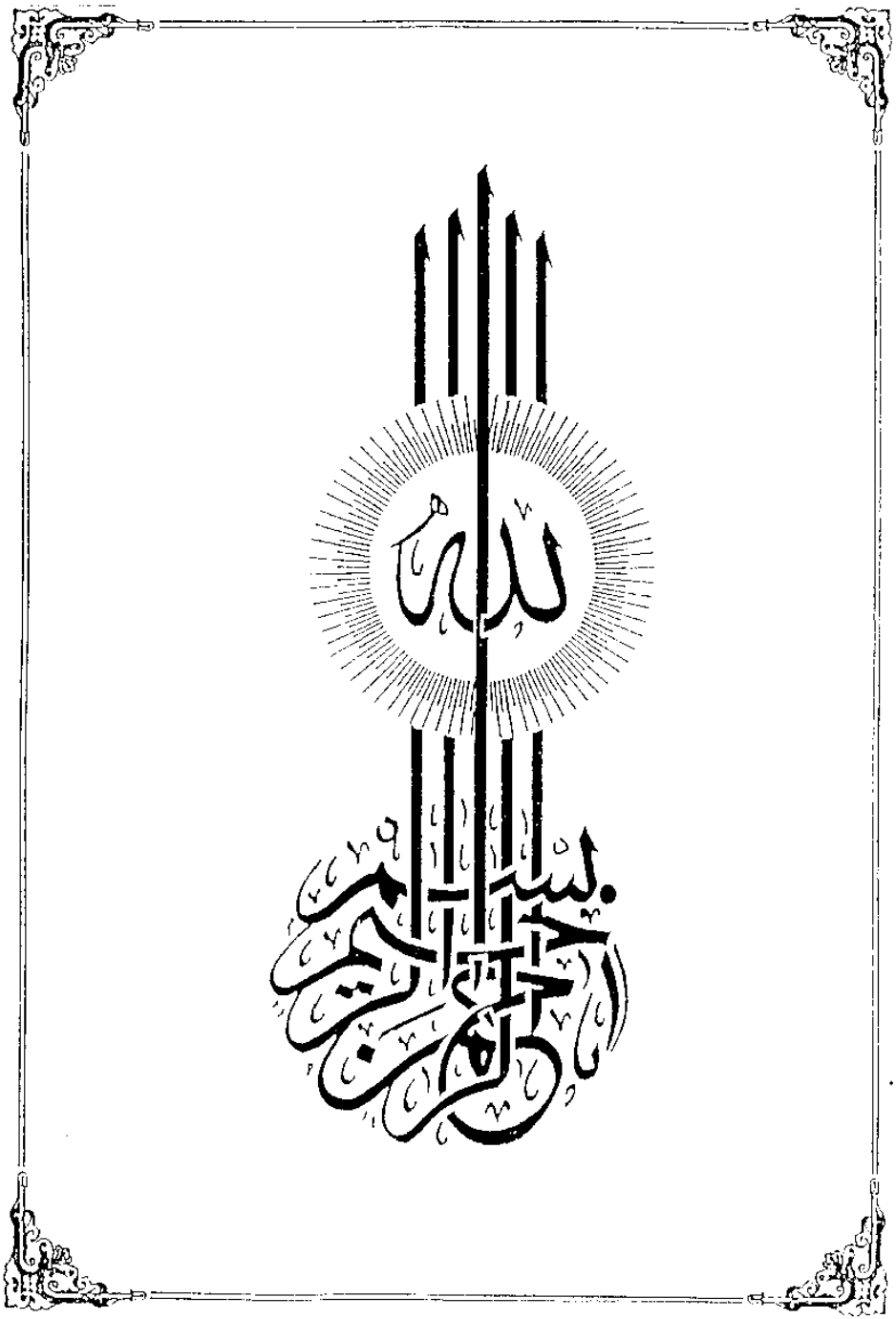

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بسم الله الرحمن الرحيم

«قالوا سبحانك لا علم لنا إلا ما علمتنا
إنك أنت العليم الحكيم» (البقرة - ٣٢)

(صدق الله العظيم)

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Introduction

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Introduction

Shoulder pain is one of the most common medical problems *(Kamel and paul, 1996)*. Disorders leading to shoulder pain make up a substantial proportion of referrals to Rheumatology Outpatient Clinics *(Croft et al., 1994)*.

Rotator cuff tendinitis is a debilitating degenerative condition that precedes tendon rupture *(Riley et al., 1994)*. 95% of patients complain of shoulder pain as a consequence to mechanical impingement of the coracoacromial arch on the rotator cuff *(Garretta et al., 1994)*.

The most frequent symptoms associated with rotator cuff disorders include pain, weakness and limitation of motion. Shoulder pain is perhaps the most common symptom and often presents with a variety of disorders overlapping symptoms with multiple shoulder conditions all contribute to the difficulty in the clinical diagnosis of the rotator cuff desorders *(Triman et al., 1997)*.

Ultrasonography imaging has a significant role in the diagnosis and hence the treatment of shoulder abnormalities. Ultrasonography is an operator-dependent technique that can demonstrate abnormalities of the rotator cuff, bursa, long head of biceps and the greater tuberosity fractures *(Patten et al., 1992)*.

Ultrasonography is being increasingly used as a fast, cheap, non-invasive technique and involves no radiation exposure for imaging shoulders and rotator cuff in particular *(Goodman and Mcnally, 1994)*.

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Diagnostic ultrasonography shows sensitivity and specificity of more than 90% in the detection of rotator cuff tear *(Van Holsbeeck et al., 1995)*.

Sonography is used to diagnosis adhesive capsulitis with sensitivity of 91% and specificity of 100%. Adhesive capsulitis was confirmed by limitation of the sliding movement of the supraspinatus tendon *(Thornhill, 1997)*.

In rheumatoid arthritis, diagnostic ultrasound has been reported to confirm early changes of synovitis, subdeltoid bursitis, and biceps tendinitis before plain radiographic findings to be observed *(Thornhill, 1997)*.

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