

## Introduction

The incidence of elbow injuries in recent decades is sharply rising as the number of participants in overhead sports as Tennis, Golf, Baseball, Football, and Volleyball is rapidly increasing **(Safran and Graham, 2004)**.

Most of these injuries in the throwing athlete are the result of the biomechanical forces imparted on the elbow during the throwing motion producing over use syndromes and elbow instability **(Carrino et al., 1998)**.

That's why an early diagnosis which allows early initiation of treatment is essential to enable athletes to return safely to competition as quickly as possible **(Frostick et al., 1999)**.

The elbow sport injuries can be roughly grouped into enthesopathies (lateral and medial epicondylitis), valgus stress injuries as the result of altered function of the primary constraint to valgus stress, medial collateral ligament (MCL) damage, posterior impingement, and nerve compression syndromes. Osteochondral lesions can also be found in younger athletes **(Frostick et al., 1999)**.

Conventional radiography is the initial screening technique for evaluation of possible osseous injury or arthritis but often it offers little information concerning soft tissue derangement, which is a common source of dysfunction **(Thornton et al., 2003)**.

Magnetic Resonance imaging has proven absolutely valuable for diagnosing most of these soft tissue injuries **(Saliman et al., 2006)**.

As the high soft-tissue contrast is the one of the most important advantage of MR imaging over conventional radiography and computed tomography, and this includes the ability to image and to discriminate, by differences in their signal intensities, bone marrow, cartilage, tendons, nerves, and vessels **(Thornton et al, 2003)**.

Magnetic resonance imaging can detect accurately sport injuries of the elbow related structures, including medial and lateral collateral ligament with high sensitivity and specificity. MRI can also determine the extent of tendon pathology in patients with medial and lateral epicondylitis. It is helpful in evaluating patients with nerve disorders at the elbow **(Kobayashi and Takahara, 2004)**.