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EDITORIAL

Current Treatment Options for Rotator Cuff Tears

Rotator cuff tears are the most frequent tendon injury in the adult population [1].

Accounting for more than 4.5 million physician visits and 250,000 surgeries per year, rotator cuff injuries are among the most common musculoskeletal injuries in the United States [2, 3]. The cost per rotator cuff repair has been estimated as 15,306 US-dollars, resulting in an annual societal burden of almost 4 billion US-dollars in the United States [3]. With the growing number of rotator cuff repairs over the last 20 years, this burden has been continuously increasing [4 - 6] and is expected to further increase in the future.

Given the importance of this topic, this thematic issue of the Open Orthopaedics Journal focusses on "Current Concepts for the Treatment of Rotator Cuff Tears".

The first manuscript by Moulton *et al*. describes the epidemiology, pathobiomechanics and natural history of rotator cuff tears. The next manuscript by Petri *et al*. describes the non-surgical treatment options, which still remain the first treatment of choice for the majority of patients. Hawi *et al*. then put the focus on debriding procedures for rotator cuff tears. Progressing to rotator cuff repair, Spiegl *et al*. compare the advantages and disadvantages of single-row *vs*. double-row repairs. This is followed by the detailed description of the surgical technique of a knotless linked double-row rotator cuff repair by Mook *et al*. Greenspoon *et al*. then elucidate the role of platelet-rich plasma and other biological adjuncts to cuff repair, with a particular focus on the available evidence.

Progressing to rotator cuff tears with poor tendon quality and irreparable tears, Petri *et al*. describe the indications, technique and results of patch-augmented rotator cuff repair and the rather novel technique of Superior Capsule Reconstruction. Of particular importance to the patients outcomes, Kokmeyer *et al*. present their concept of postoperative rehabilitation after rotator cuff repair. The thematic issue is completed by the manuscripts on tendon transfers (Greenspoon *et al*.) and reverse total shoulder arthroplasty (Virk *et al*.) for irreparable rotator cuff tears.

To summarize, the decision-making and treatment algorithms for rotator cuff tears keep evolving. As fostered by significant improvements in surgical instruments and surgical technique, patients outcomes have been improving remarkably in the recent few years. However, there is still a lot of room for improvement to achieve better results for our patients in the future.

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