Assessment of outcome of arthroscopic rotator cuff repair

Mohamed Salah Sharaf Singer

In the last two decades, rotator cuff pathology has become an increasingly common diagnosis for patients having a painful shoulder. It is one of the most common causes of shoulder pain and dysfunction. However the exact prevalence is not well known with reports suggesting a wide range between 5% to 17% of population with incidence increase with age. The goal of the treatment is to achieve a painless normally functioning shoulder to get a better quality of the patient life. This is achieved through either a conservative or an operative regimen. The conservative regimen for the treatment include: rest, non-steroidal anti-inflammatory drugs, steroid injection into the subacromial space and physiotherapy. The operative regimen is indicated in case of a persistent pain and disability despite adequate conservative treatment. Either open, mini-open, or arthroscopic repair yeild excellent results. The aim of the current study was to evaluate the outcome of arthroscopic rotator cuff repair with emphasis on different variables that may affect outcome such as patient age, tear size, presence of associated long head ofbiceps pathology, and fixation technique used.28 patients were enrolled in the current study. The mean patients age was 61.6 years. There were 17 males and 11 females. 19 patients were enrolled in manual work in their careers. The dominant hand was affected in 58 % of the patients. Inclusion criteria were symptomatic full thickness rotator cuff tear with failed conservative treatment for at least 6 months. Exclusion criteria included any previous shoulder surgery, massive rotator cuff tear, or concomitant glenohumeral pathology or arthritis. The diagnosis of rotator cuff disease was essentially a clinical diagnosis. However radiographs, US or MRI were used for confirming the clinical diagnosis and defining tear size, retraction, muscle atrophy and fatty infiltration, and to detect concomitant GH pathology. The technique of the arthroscopic rotator cuff repair involved at first a gleno-humeral arthroscopy for the detection of any associated gleno-humeral pathology and rotator cuff tears, then performing a subacromial bursoscopy to allow identification of the tear, partial bursectomy and releases and mobilization of cuff tendon as necessary. This is followed by repair of the cuff torn edge to greater tuberosity foot print using suture anchors. Rotator cuff tears were classfied according to the size of the tear into small (5cm). There were 10 small tears, 14 medium sized tears, and 4 large tears. Tears below 2 cm with mild retrction (10 small and 7 moderate tears) were repaired using single row repair technique, while the remaining 11 cases were repaired using double row suture bridge technique, the results obtained throughout this study had revealed that the arthroscopic rotator cuff repair is an effective method in the management of patients with satisfactory results obtained in 100% of cases with marked relief of the patients' pain and a great improvement regarding their range of movements, muscle strength and satisfaction irrespective of patient age, cuff tear size or repair technique used. Such results are consistent with many other recently publisher case series and systematic reviews. The complications encountered were very few; including one case of superficial infection and another case of hypersensitive scar. No major or neurovascular complications were encountered in the current study.