

BIPOLAR REPLACEMENT IN RHEUMATOID ARTHRITIS

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The pathology seen in rheumatoids is variable and often the shoulder or joint complex is involved. Many patients undergoing glenohumeral replacement for rheumatoid disease as well require resection of the AC joint which is commonly involved concomitantly. The glenohumeral joint is often medialized in advanced disease and one sees a decrease in the acromial-tuberosity distance. The tuberosity must be restored to a position well lateral to the acromion in order to restore deltoid abduction power and lever arm power of the rotator cuff. The Bipolar prosthesis answers these problems well as will be shown in many examples.

In addition, the humerus is large in rheumatoid patients and the bone quite unpredictable and for that reason all humeral components must be cemented and examples will be presented. If external rotation is limited, the subscapularis must be lengthened by dissecting it free in a single layer with the capsule and then reattaching it to the humeral osteotomy site—not by z-lengthening.

Bipolar shoulder replacement is recommended for rheumatoid disease and a glenoid should never be implanted if the cuff is irreparable or one will surely have early loosening of the glenoid secondary to a rocking horse phenomenon. If the joint is too tight to insert a Bipolar component, then a hemi replacement is the perfect answer.

In rheumatoid disease advantages of the Bipolar are that the Bipolar results in an increase in the acromial-tuberosity distance with the resultant increase in the lever arm of the deltoid and the supraspinatus muscles. A Bipolar is indicated with glenoid bone deficiency and as well, the cuff status is irrelevant. The birotational head results in increased stability and decreased acromial and glenoid wear over time. The surgery is uncomplicated and the inventory of stems, shells, and heads permits appropriate soft tissue tensioning.