

INNOVATIVE FASCIA GRAFTS FOR THE MASSIVE ROTATOR CUFF TEARS - APRELIMARY REPORT

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INTRODUCTION

This preliminary report study was conducted if some innovative fascia graft for massive cuff tears could yield more predictable outcome than conventional patch graft could.

PATIENTS AND METHODS

There were seven men and two women in the series and the age ranged from 47 to 87 with an average of 68.8 years old. The follow-up ranged from 13 to 273 months with an average of 68.8 months. Three kinds of autogenous fascia lata graft were performed in nine massive rotator cuff tears. They were, #1 conventional patch graft in four patients, #2 "soft-tissue cap" graft in three, and #3 "infoldingcapsulo-tendinous" graft in two (Figure).

In #2 procedure, the one end of rectangular fascia graft folded into two to four sheets, was anchored to the superior margin of the glenoid, without suturing to the proximal stump of the retracted cuff. The two sides of the graft were sutured to the residual cuff stumps anteriorly and posteriorly. The distal end of the graft was sutured to the long head of the biceps tendon to prevent the inversion of the "cap", without anchoring to the greater tuberosity. Then the humeral head can move freely in the "cap", allowing the deltoid to elevate the arm.

In #3 procedure, the one end of the graft was sutured to the superior margin of the glenoid, and the other end to the proximal stump of the cuff, as a letter "V" when looked from the side. Then the infolded part of the graft was securely anchored to the bone trough in the greater tuberosity in good tension, with the arm abducted in 30 degrees.

RESULTS

Using Neer's criteria for assessment, satisfactory results were obtained in four of nine shoulders; one of four patch grafts, one of three "soft-tissue cap" grafts and two of two "infolding capsulo-tendinous" grafts.

DISCUSSION AND CONCLUSION

The conventional patch graft is unpredictable and the "soft-tissue cap" graft is a desperate procedure when the supraspinatus muscle is no more functioning or too retracted. The "infolding capsulo-tendinous" graft appears promising, although the number of cases is still too small. It is an anatomical repair and can prevent the ascent of the humeral head by the double layers, the superficial one of which acts as a dynamic buttress and the deeper one as a static buttress.