Augmentation for Massive Rotator Cuff Tear with Human Acellular Dermal Matrix (ADM)

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INTRODUCTION

Surgical treatment of massive rotator cuff tears remains a challenging procedure with variable rates of tendon healing and clinical improvement.

The purpose of this study is to report the early results of patients treated with open rotator cuff repair using human ADM augmentation (Surederm®. Hansbiomed, Daejeon, Korea)

MATERIALS and METHODS

Thirteen patients (7 males, 6 females) underwent open rotator cuff repair with human ADM. Average age was 58.8 (50-78) years. The mean follow-up was 16.8 months (range 12-24 months). Patients were evaluated clinically using the Visual Analogue Scale(VAS), KSS, UCLA score, Constant score preoperatively and at final follow-up when ultrasound and magnetic resonance imaging scans were performed to assess for graft and rotator cuff integrity.

RESULTS

The mean UCLA score increased from preoperative 10.5(range 9-15) to 32(range 20-35) ($P<0.05$). Average Constant scores improved from 41 preoperatively to 70 at final follow-up ($P<0.05$). Patient satisfaction levels were high. Imaging studies identified intact grafts in 6 patients and retear in 2. No adverse side effects were reported during follow-up period.

CONCLUSION

The use of human ADM as an augmentation graft in the treatment of massive rotator cuff tears is safe and, in most patients, is associated with improved clinical outcome.