International Continence Society August 22-26, 1999

29th Annual Meeting

Denver, Colorado USA

Category No.

14

Video Demonstration Ref. No. 502

## Abstract Reproduction Form B-1

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INTRODUCTION: The management of urethral strictures has been, and continues to be, a challenge. Endourologic treatment of urethral stricture, regardless of etiology traumatic, inflammatory, congenital or iatrogenic - has always been associated with the frustrating problem of recurrence rates up to 75%. Open surgical reconstruction is difficult and highly specialized. Simplification of surgical management would be of enormous benefit to both the patient and the surgeon.

MATERIAL AND METHODS: 4 patients affected by genitourinary stricture disease (1 anterior urethral and 3 posterior urethral strictures) underwent endoscopic urethrotomy followed by autologous fat injection. All patients had failed at least 2 internal urethrotomies. The fat graft was harvested through lipo-aspiration from the suprapubic area. The aspirated fat was prepared by emulsification with ultrasound and repetitive washing with saline until the fat was a fine globular material. After endoscopic incision of the strictured region, the fat was injected into and around the site of the incision utilizing a 22 gauge Bard needle. Uroflow pre- and post have been evaluated.

RESULTS: Peak uroflow rates prior to surgery were < 10ml/sec and the flow pattern was plateaued, after the operation (max. follow-up 2 years) the flow rates were > 15ml/sec in one patient and > 25ml/sec in 3 patients. All patients converted to a bell-shaped curv

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CONCLUSION: Fat is desmolytic and therefore highly useful in reduction of scar formation in surgical wounds. In our clinical trial autologous fat was injected, and successfully achieved a decrease in the formation of recurrent stricture after urethrotomy. This technique brings significant benefits to patients managed for genitourinary stricture disease and significant cost savings to this area of surgery.