

## **EFFICACY AND HARVEST SITE MORBIDITY OF AUTOLOGOUS FASCIA LATA SLING CYSTOURETHROPEXY FOR STRESS INCONTINENCE**

### **Aims of Study**

Sling cystourethropexy is a common surgical treatment for stress urinary incontinence due to intrinsic sphincter deficiency. Many modifications of the pubovaginal sling procedure exist, with the largest variety being the source of sling material. Numerous materials have traditionally been employed to correct stress urinary incontinence, including cadaveric fascia, synthetic materials, and autologous tissues. The use of allografts (donor or cadaveric tissues) is associated with risk of infectious disease transmission and graft autolysis. Synthetic materials may erode or become infected. Advantages of autologous tissues (rectus fascia, fascia lata, vaginal wall) include no risk of erosion or disease transmission, and very low risk of infection. Potential disadvantages to autologous fascia use are the possible complications and morbidity associated with graft harvest and harvest site. In addition, inconsistent strength, unavailability and harvest site incision size play a role. The aims of this study are to determine the long-term treatment efficacy of, harvest site morbidity of and patient satisfaction with autologous fascia lata sling cystourethropexy.

### **Methods**

According to Institutional Review Board protocol, a retrospective database review identified all women who underwent sling cystourethropexy using autologous fascia lata for treatment of stress urinary incontinence. Postoperative course, treatment efficacy, and patient satisfaction and quality of life were assessed. A follow-up survey study of autologous fascia lata sling cystourethropexy using pre-validated questionnaires was conducted. Surveys comprised of validated questionnaires (Black and UDI-6) with additional questions regarding satisfaction (Korman, Uebersax) and leg morbidity were mailed to the patients identified for study.

### **Results**

One hundred subjects underwent autologous fascia lata sling cystourethropexy by a single surgeon between 1993 and 2002. Mean patient follow-up was 4.4 years (range 0.8 to 9.3). Seventy-four percent of patients were followed for more than 3 years. Sixty-three surveys were returned (63%). With regard to treatment efficacy, 85% of patients stated they were dry or improved. There has been no morbidity or complication with the abdominal incision. Postoperatively, 47% reported being able to ambulate free from pain immediately, while 93% were pain-free at the lower extremity autologous fascia harvest site by the end of the week. 20% of patients reported an initial localized numbness at the harvest site and 5% reported subsequent tendonitis in the harvest site leg. One patient required physical therapy to resolve a harvest site hematoma. There has been no harvest site infection and no lower extremity thrombotic complication. The harvest site did not delay the post-operative course or discharge from the hospital in 99 out of the 100 patients. The thigh incision was cosmetically acceptable to all patients. 83% of women indicated the procedure had a positive effect on their life, with only 4% stating it had a negative effect on their life. 77% reported that they were satisfied with the surgical procedure. When asked if they would recommend this surgery to a friend with incontinence, 82% stated that they would. When asked if they would they still undergo the same surgery if making the decision again, 83% stated that they would.

### **Conclusions**

Autologous fascia lata sling cystourethropexy is associated with a high patient satisfaction and long-term treatment efficacy as determined by validated questionnaire. The long-term complication rate at the fascia lata harvest site is low. Given the immunologic concerns regarding disease transmission from donor or cadaveric fascia, autolysis of allograft material, and the complications associated with possible erosion of synthetic materials, the use of autologous tissue has demonstrable advantages over other materials. Autologous fascia lata compares favorably in efficacy to other materials and is not associated with any significant morbidity. Sling cystourethropexy using autologous fascia lata should be considered as a primary surgical approach in women with stress urinary incontinence.