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## TREATMENT OF STRESS URINARY INCONTINENCE USING AUTOLOGOUS DERMAL GRAFT PATCH AS A SLING MATERIAL

**Aims of study:** Traditional pubovaginal sling procedure has undergone some modifications, with alteration in both the technique and the choice of sling material. Typically, the sling used is autologous and is harvested from either the rectus fascia or fascia lata. These procedures need wide dissections or additional incision to take sling material. Numerous non-autologous materials have also been used for the sling but synthetic materials have been associated with increased rates of infection and erosion. We have used autologous dermal graft patch as a new sling material which harvested from patient's lower abdominal skin. The aim of study is to evaluate our results of this sling procedure for stress urinary incontinence.

**Methods:** Since 1999 January, 25 patients (15 with anatomical incontinence and 10 ISD) with a mean age of 48.7 years underwent this modified sling procedure using dermal graft patch. Brief description of method is as follows. First, an outline of patch sized 2.5 X 3.5 cm is drawn on suprapubic region avoiding pubic hair. With sharp dissection using #12 blade, epidermis is removed from dermis and the patch containing dermis and some subcutaneous fat is harvested. Both sides of dermal patch is secured by helical suture with #1 prolene. A midline incision is made on anterior vaginal wall. A suture passer is carried down from the suprapubic incision to vagina. The prolene sutures anchored at both sides of dermal graft are loaded into the suture passer and subsequently brought back up to the suprapubic incision. Dermal graft patch is positioned at the level of bladder neck and sutures are tied over the rectus fascia with no tension.

**Results:** With a mean follow-up of 9.4 months (range 1 to 14), 24 women (96%) reported satisfaction (20 dry, 4 improved). Mean operative time was 42.5 minutes and mean hospital stay was 3.4 days. Mean postoperative catheter drainage was 3.2 days. Complication associated with dermal graft was not noted. De novo urgency developed in 2 (8%) patients.

**Conclusions:** This modified sling procedure using autologous dermal graft patch is safe and effective with high success rate. Longer follow-up and comparative studies are needed to document the extended duration of effect compared to pubovaginal sling with rectus fascia or others.