

FOLLOW UP AFTER PERINEAL NEUROVASCULAR ISLAND FLAP GRAFT FOR SEVERELY SCARRED PERINEUM.

Hypothesis / aims of study

To follow a group of women who have undergone a neurovascular perineal island flap graft for reconstruction of a severely scarred perineum.

Study design, materials and methods

A follow up study by independent reviewer.

The pudendal thigh fasciocutaneous flap has been described as an island flap for reconstruction of the vulva, vagina and (male) perineal area. This flap has been described for creation of a neovagina, or to replace vaginal tissue in the case of a vaginectomy for oncology cases and is classically used bilaterally.[1]

The perineum and vagina are derived from embryologically different tissues and therefore cannot be reconstructed in the same manner. While the vagina will re-epithelise if areas are removed, the perineum forms areas of scarification. This creates a challenge is these women with severely scarred perineums who have often undergone repeat surgeries in the area to address their problems.

The surgical technique has been presented as a video presentation previously.[2] When the perineum is severely scarred, the scar tissue must firstly be fully excised until healthy tissue is reached. There must be mobilisation of the healthy tissue to ensure further tethering of the tissue does not occur. The defect in the perineum and posterior vagina is then measured and a longitudinally orientated flap of the same dimensions as the skin/ mucosal defect is designed in the skin crease at the lateral margin of the labia majoris. This flap is centred over the perforating branches of the perineal neurovascular pedicle. The flap is raised from anterior to posterior in a plane superficial to the deep fascia. At the posterior extent of the flap blunt dissection is used to isolate the pedicle and a tunnel dissected in the subcutaneous tissue to communicate with the skin/ mucosal defect. The flap is then passed through this tunnel and sutured using dissolving vicryl sutures. The donor defect is closed directly in layers over a Jackson-Pratt drain.

Results

From February 2003 until November 2004, 5 women underwent this procedure. All patients presented with perineal pain and/or dyspareunia. Median age at time of surgery was 39 years (range 32-70). Three women had presented after complications following childbirth. One woman had undergone a vaginal repair and one woman had undergone extensive vulval excision for carcinoma in situ. 2 women had undergone perineal revision to remove scar tissue without improvement. Median follow up time was 16 months (range 5-25).

Three of the 5 women required further revision to the flap following the surgery.

At follow up, 4 of 5 women felt that their symptoms had improved following surgery.

Interpretation of results

In a group of women who represent a challenging clinical problem, most women felt that their symptoms had improved. There was a high proportion who required further surgery and refashioning of the graft.

Concluding message

The perineal island flap graft is a safe technique which offers improvement in symptoms for women with a severely scarred perineum. Careful assessment and ongoing consultation with plastic surgical colleagues is required to manage these women.

Reference

1. The versatility of the pudendal thigh fasciocutaneous flap used as an island flap. *Plast Reconstr Surg* 2001;107:719-725.
2. Perineal neurovascular island flap graft for severe introital/perineal scarring. ICS Congress Abstracts. Paris 2004.