Sigmoid Vaginoplasty after Failed Sex Reassignment Surgery in Male Transsexuals

Introduction and Objectives: Postoperative vaginal absence or obliteration presents the most difficult complications after vaginoplasty in male transsexuals. We evaluated our results in re-do vaginoplasty using sigmoid colon.

Material and Methods: Between April 2000 and October 2011, 29 female transsexuals, aged 26 to 59 years (mean 32) underwent sigmoid vaginoplasty due to failed vaginal reconstruction. Penile skin inversion technique in 23 and free graft vaginoplasty in 6 patients were used. Isolated segment of rectosigmoid ranged from 8 to 11cm to avoid excessive mucus production. Rectosigmoid was harvested with blood supply originating on sigmoidal arteries or/and superior haemorrhoidal vessels. Stapling device was used for the colorectal anastomosis as a safest procedure. Creation of perineal cavity for vaginal replacement was done by abdominal and transperineal approach, simultaneously. Introital remnants or perineal skin flaps were used for anastomosis with sigmoid vagina. Postoperative dilation was recommended to prevent purse string scarring 6 months after surgery. Sexual and psychosocial outcomes assessment was based on Female Sexual Function Index, Beck's Depression Inventory and standardized questionnaires.

Results: Follow-up ranged from 6–143 months (mean 47). Good aesthetic result was achieved in 24 cases. Neovaginal prolapse (2) and deformity of the introitus (3) were repaired by minor surgery. There was no excessive mucus production, vaginal pain, or diversion colitis. Satisfactory sexual and psychosocial outcome was achieved in 24 patients.

Conclusions: Sigmoid colon presents a good choice for creation of neovagina in male transsexuals after failed vaginoplasty with minimal postoperative complications.