

Outcome of Vaginoplasty in Male-to-Female Transgenders: A Systematic Review of Surgical Techniques

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ABSTRACT

Introduction. Gender reassignment surgery is the keystone of the treatment of transgender patients. For male-to-female transgenders, this involves the creation of a neovagina. Many surgical methods for vaginoplasty have been opted. The penile skin inversion technique is the method of choice for most gender surgeons. However, the optimal surgical technique for vaginoplasty in transgender women has not yet been identified, as outcomes of the different techniques have never been compared.

Aim. With this systematic review, we aim to give a detailed overview of the published outcomes of all currently available techniques for vaginoplasty in male-to-female transgenders.

Methods. A PubMed and EMBASE search for relevant publications (1995–present), which provided data on the outcome of techniques for vaginoplasty in male-to-female transgender patients.

Main Outcome Measures. Main outcome measures are complications, neovaginal depth and width, sexual function, patient satisfaction, and improvement in quality of life (QoL).

Results. Twenty-six studies satisfied the inclusion criteria. The majority of these studies were retrospective case series of low to intermediate quality. Outcome of the penile skin inversion technique was reported in 1,461 patients, bowel vaginoplasty in 102 patients. Neovaginal stenosis was the most frequent complication in both techniques. Sexual function and patient satisfaction were overall acceptable, but many different outcome measures were used. QoL was only reported in one study. Comparison between techniques was difficult due to the lack of standardization.

Conclusions. The penile skin inversion technique is the most researched surgical procedure. Outcome of bowel vaginoplasty has been reported less frequently but does not seem to be inferior. The available literature is heterogeneous in patient groups, surgical procedure, outcome measurement tools, and follow-up. Standardized protocols and prospective study designs are mandatory for correct interpretation and comparability of data. **Horbach SER, Bouman M-B, Smit JM, Özer M, Buncamper ME, and Mullender MG. Outcome of vaginoplasty in male-to-female transgenders: A systematic review of surgical techniques. J Sex Med **,:**_**.**

Key Words. Vaginoplasty; Transsexualism; Gender Identity Disorder; Sex Reassignment Surgery; Penile Inversion Vaginoplasty; Bowel Vaginoplasty
