

Penile venous stripping and tunical surgeries for patient with penile dysmorphology and erectile dysfunction under acupuncture-aided local anesthesia on ambulatory basis

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Background: Our method of penile venous stripping and morphological reconstructive surgeries have been chronologically developed since 1986. We report on an advisable approach for two surgeries simultaneously.

Materials and Methods: From October 1998 to July 2011, a total of 132 men, aged from 23 to 39 years, with erection dysfunction (ED) resulting from veno-occlusive dysfunction (VOD) associated with penile deviation underwent penile venous stripping and morphological reconstruction at the same time. Among these before or after August 2002 37 and 95 men were categorized into the transverse and longitudinal group in accordance with an infrapubic transverse or pubic median longitudinal skin incision respectively. The abridged five-item version of the International Index of Erectile Function (IIEF-5) was used to score the patients and follow-up cavernosography if necessary. Under an innovative method of acupuncture-aided local anesthesia, then a circumferential incision, the deep dorsal vein (DDV) and cavernosal veins (CVs) were thoroughly stripped and subsequently ligated with 6-0 nylon sutures followed by tunical surgery for idealizing penile shape. Operation time, infection rate, time of penile edema, penile deviation degree, overall satisfaction rate and prevalence of hypertrophied scar were analyzed.

Results: In the transverse and longitudinal groups the average operation time was 4.6 ± 0.2 and 4.8 ± 0.3 h respectively. The follow-up period ranged from 1.2 to 13.2 years, with an average of 7.3 ± 1.3 years. Preoperatively the IIEF-5 was 9.6 ± 2.1 and 9.4 ± 2.2 which was increased to 20.6 ± 2.3 and 20.8 ± 2.4 respectively. A satisfactory penile shape ($< 15^\circ$) was achieved in 94.6% (35/37) and 95.8% (91/95) patients in the transverse and longitudinal groups respectively. The cavernosograms consistently disclosed a good penile shape. There were significantly favorable in longitudinal group in term of penile edema (3.2 ± 1.6 vs. 11.9 ± 2.1 days), overall satisfaction rate and prevalence of hypertrophied scar (all $P < 0.001$) although no difference was noted on operative time, postoperative infection and IIEF-5 score.

Conclusion: A circumferential incision plus pubic median longitudinal approach appears to present an optimal approach for penile erectile function restoration and morphological reconstruction surgeries on ambulatory basis.

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