



Figure S1 Flow chart of inclusion and exclusion criteria of the study sample. PIV, penile inversion vaginoplasty.

Table S1 Classification of surgical complications

Grade	Definition
Grade I	Any deviation from the normal postoperative course without the need for pharmacological treatment or surgical, endoscopic, and radiological interventions. Allowed therapeutic regimens are: drugs as antiemetics, antipyretics, analgetics, diuretics, electrolytes, and physiotherapy. This grade also includes wound infections opened at the bedside
Grade II	Requiring pharmacological treatment with drugs other than such allowed for grade I complications Blood transfusions and total parenteral nutrition are also included
Grade III	Requiring surgical, endoscopic or radiological intervention
Grade IIIa	Intervention not under general anesthesia
Grade IIIb	Intervention under general anesthesia
Grade IV	Life-threatening complication (including CNS complications) [†] requiring IC/ICU management
Grade IVa	Single organ dysfunction (including dialysis)
Grade IVb	Multiorgan dysfunction
Grade V	Death of a patient

[†], brain hemorrhage, ischemic stroke, subarachnoidal bleeding, but excluding transient ischemic attacks. CNS, central nervous system; IC, intermediate care; ICU, intensive care unit. Reproduced with permission from Dindo D, Demartines N, Clavien PA. Classification of surgical complications: a new proposal with evaluation in a cohort of 6336 patients and results of a survey. *Ann Surg* 2004;240:205-13 (36).

Table S2 Summary of all-cause intraoperative and postoperative acute and long-term complications

Complications	Total (n=182)	PIV (n=115)	PIV-APT (n=67)	P value
Intraoperative complications, n (%)				
Urethral injury	2 (1.1)	2 (1.7)	0 (0.0)	0.532
Rectal injury	0 (0.0)	0 (0.0)	0 (0.0)	–
Postoperative complications, n (%)				
Hematoma or bleeding	12 (6.6)	12 (10.4)	0 (0.0)	0.004
Blood transfusion	3 (1.6)	3 (2.6)	0 (0.0)	0.298
Pulmonary embolus	1 (0.5)	0 (0.0)	1 (1.5)	0.368
Neovaginal prolapse	3 (1.6)	2 (1.7)	1 (1.5)	1.00
Rectovaginal fistula	2 (1.1)	2 (1.7)	0 (0.0)	0.532
Urinary retention [†]	15 (8.2)	10 (8.7)	5 (7.5)	1.00
Urinary tract infection	11 (6.0)	8 (7.0)	3 (4.5)	0.749
Loss of sensation	7 (3.8)	4 (3.5)	3 (4.5)	0.709
Dyspareunia	7 (3.8)	6 (5.2)	1 (1.5)	0.264
Hypersensitivity	1 (0.5)	1 (0.9)	0 (0.0)	1.00
Anorgasmia	11 (6.0)	8 (7.0)	3 (4.5)	0.749
Urinary issues [‡]	27 (14.8)	19 (16.5)	8 (11.9)	0.518
Excessive erectile tissue	26 (14.3)	19 (16.5)	7 (10.4)	0.283

[†], required reinsertion of catheter; [‡], includes incontinence and splayed urinary stream. PIV, penile inversion vaginoplasty; APT, allogeneic placental tissue.

Table S3 Modified Clavien-Dindo classification of all-cause surgical complications (36,37)

Grade	Total	PIV	PIV-APT	P value
Total no. of graded complications (%)	297 (100.0)	219 (73.7)	78 (26.3)	0.012
No. of patients experiencing at least one complication within the grade (%)				
Grade I	98 (53.8)	67 (58.3)	31 (46.3)	0.126
Any deviation from the normal postoperative course and not requiring intervention				
Grade II	15 (8.2)	11 (9.6)	4 (6.0)	0.578
Requiring pharmacological treatment				
Grade III, any	83 (45.6)	59 (51.3)	24 (35.8)	0.047
Requiring intervention through surgery, endoscopy, or radiological procedures				
IIIa: intervention not under general anesthesia	0 (0.0)	0 (0.0)	0 (0.0)	–
IIIb, acute: intervention under general anesthesia [†]	14 (7.7)	14 (12.2)	0 (0.0)	0.002
IIIc, long-term: intervention under general anesthesia [‡]	82 (45.1)	58 (50.4)	24 (35.8)	0.065
Grade IV	0 (0.0)	0 (0.0)	0 (0.0)	–
Life-threatening complication requiring intensive care unit management				
IVa: single-organ failure	0 (0.0)	0 (0.0)	0 (0.0)	–
IVb: multi-organ failure	0 (0.0)	0 (0.0)	0 (0.0)	–
Grade V	0 (0.0)	0 (0.0)	0 (0.0)	–
Death of a patient				
	–	–	–	–

See *Table S1* for a full description of the Clavien-Dindo classification system. [†], acute postoperative period; [‡], assessed >6 months follow-up. PIV, penile inversion vaginoplasty; APT, allogeneic placental tissue.