Innovation: Lengthened Penile Skin-Urethral-Scrotal Flap for Neovaginoplasty of Male Transsexuals

Po-Cheng Huang, M.D. Shyeu-Yih Horng, M.D.
The Division of Plastic and Reconstructive Surgery,
Department of Surgery,
National Taiwan University Hospital, Hsin-Chu Branch

Nothing To Disclose
Objective

- Neovaginoplasty is one part surgery of sex assignment surgery (SAS).

- Eastern used hormone therapy made shorten and smaller external genital organ.

- We created a new flap for neovaginoplasty of male transsexuals to resolve and make the ideal vaginal length.
Material and Method

• 28 y/o male denied any systemic disease
• sexual identity problem since senior high school
• Psychiatric OPD since 2009
• Hormone therapy since 2011-08
• Sex reassignment surgery (SRS) 2012-12
Pre-Operation

2 cm penis length

Atrophy scrotum

lithotomy position
Midline scrotal incision is made for bilateral orchiectomy.
Penile Disassembly

- Subcoronal circumferential incision
- Degloving penile skin
- Dorsal Neurovascular Bundle
- Corpus spongiosum With urethral
Complete Disassembly

- Preputial and penile skin
- Dorsal half of glans cap with neurovascular bundle
- Remnant of the corpora cavernosa
- Scrotal skin
- Ventral half of glans cap with urethra

Penectomy and Orchitectomy
Create Neovagina Tunnel

- Create neovagina between rectum and bladder by gynocologist with blunt dissection
Lengthened Penile Skin

- Ventral side of penile skin flap
- Dorsal side of penile skin flap
- Horizontal incision above deep fascial layer
- Longitudinal incision for urethral flap
- Fixation
- 6cm lengthening

Penis Skin
Neo-vaginoplasty

- Penile skin flap
- Scrotal skin flap
- Urethral flap
- Neo-clitoris
- Incisional flatted urethral flap-mucosa
- Neo-cervix by part of ventral glan
- Scrotal skin flap
- Urethral opening-on foley
- Lengthening penile flap
- Penile skin flap
- Silicon stent
- Neoclitoris
- Penile skin flap
- Scrotal skin flap
- Neo-cervix by part of ventral glan
Lateral View

Scrotal flap

Urethral opening

Subcutaneous tissue

Corpus spongiosum

Lengthened penile skin flap

Subcutaneous tissue

Urethral mucosa

Neo-cervix

Penis Skin
Result  Post OP 9 months
Conclusion

• Lengthened Penile skin-urethral-scrotal flap for neovaginoplasty can provide not only satisfied moisture and sensitivity for sexual function, but create longer vaginal length to Eastern male transsexuals receiving hormone therapy with little penis.
Significance of the Findings

- Horizontal incision creating above deep fascial layer in penile skin flap can increase total flap length and the circulation of flap was still good.
Thank You