

Gender Affirming Surgery

WPATH Training on current standards in surgical treatment for gender dysphoria associated with gender incongruence

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Disclosures

None

Disclaimer

CPT codes listed in this presentation are the most frequently utilized. As surgeries can differ depending on clinical situation and surgeon approach and as surgeries evolve, other CPT codes may be submitted by individual providers.

Surgical assistants and/or co-surgeons may be required for various procedures

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Content

- Overview of multi-disciplinary care team and their roles
- Preoperative Evaluation and Standards of Care, Version 7¹
- Surgeries
 - Overview
 - Basic description
 - Variations and Staging
 - Coding

Coleman, E et al. (2012). Standards of care for the health of transsexual, transgender, and gender-nonconforming people, version 7. *International Journal of Transgenderism*, 13(4), 165–232.

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Surgical Providers*

(surgical assistants and/or co-surgeons may be required based on the procedure and/or clinical circumstances)

Specialty	Facial Feminization	Chest Feminization	Feminizing Genital Surgery ¹	Voice Surgery	Body Contouring	Facial Masculinization	Chest Masculinization ¹	Masculinizing Genital Surgery	Body Contouring
Plastic Surgery	●	●	●		●	●	●	●	●
Reconstructive Urologist			●					●	
Gynecologist			●					●	
Fertility			●					●	
ENT	●			●		●			
OMFS	●					●			

¹ Including Gonadectomy or Hysterectomy and/or sperm/oocyte preservation
* Other surgeons and/or consultants may be required on an as needed basis (ie colorectal surgeon)

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Other Providers directly related to GAS*

Specialty	Facial Feminization	Chest Feminization	Feminizing Genital Surgery	Voice Surgery	Body Contouring	Facial Masculinization	Chest Masculinization	Masculinizing Genital Surgery	Body Contouring
Mental Health & Social Work	●	●	●	●	●	●	●	●	●
Electrologist / Dermatologist	●		●					●	
Physical Therapy ²		●	●					●	
Occupational Therapy								●	
Speech Language Pathologist			●	●					
Radiology	●	●	●			●		●	
Pathologist			●				●	●	
Allied Health Professional (NP, PA, etc)	●	●	●	●	●	●	●	●	●

2) Jiang DD et al. Implementation of a Pelvic Floor Physical Therapy Program for Transgender Women Undergoing Gender-Affirming Vaginoplasty. *Obstet Gynecol.* 2019 May;133(5):1003-1011
 * Other professionals may be required on an as needed basis

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Medically Necessary SOC 7 vs. SOC8

	Facial Feminization	Chest Feminization	Feminizing Genital Surgery	Voice Surgery	Body Contouring	Facial Masculinization	Chest Masculinization	Masculinizing Genital Surgery	Body Contouring
SOC 7	●	●	●				●	●	
SOC 8	●	●	●			●	●	●	●

● Generally considered medically necessary / reconstructive
 ● Depends upon clinical scenario

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1) Coleman, E et al. (2012). Standards of care for the health of transsexual, transgender, and gender-nonconforming people, version 7. *International Journal of Transgenderism*, 13(4), 165-232.

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Preoperative Evaluation Standards Across Disciplines

Requirement	Facial Feminization	Chest Feminization	Feminizing Genital Surgery ¹	Voice Surgery	Body Contouring	Facial Masculinization	Chest Masculinization ¹	Masculinizing Genital Surgery	Body Contouring
Mental Health Letter x1		●					●		
Mental Health Letter x2			●					●	
Hormones >12 months (if indicated/desired)		●	●					●	
Hormones 6 months (if indicated/desired)							●		
Social Transition >12 months			●					●	
Age of majority			●					●	

● Recommended not required
 ● Within clinically appropriate context, may be performed under the age of 18

¹ Gonadectomy alone does not require social transition for 12 months

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- ### Common issues in gender-affirming surgery
- Use of gendered codes (with discordance between cpt code and gender markers)
 - Staged and/or revision procedures do not require resubmission of assessment letters (unless clinically indicated)
 - Denial of medically necessary codes
 - Nipple-areola reconstruction in chest masculinizing surgery
 - Skin graft codes in vaginoplasty
 - Approval for Skilled Nursing Facility (SNF) follow surgery
 - Age-related denials for medically necessary procedures
 - Mastectomy under the age of 18 yrs
 - Epilation (i.e., electrolysis/laser hair removal) is medically necessary (CPT codes 17380, 17999)
 - Vaginoplasty
 - Phalloplasty
 - Facial Surgery
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Feminizing Surgeries Overview

- Facial Feminization Surgery
- Chest Feminization
- Orchiectomy
- Vulvoplasty (0-depth vaginoplasty)
- Vaginoplasty
 - Penile Inversion Vaginoplasty
 - Robotic assist Vaginoplasty
 - Intestinal Vaginoplasty
- Body Contouring
- Voice Surgery

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Facial Feminization Surgery

Indication:

AMAB (assigned male at birth) individuals with facial gender markers incongruent with their gender identity

Internal Response to
Gender Incongruence



External Response to
Gender Incongruence

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Multimodal and multi-disciplinary approach

- Mental Health (specific to FFS)
 - Understanding expectations
 - Management of postoperative care
 - Societal response / mental health impact of persistent misgendering
- Gender Expression / Styling
- Hair removal (!)
- Effects of exogenous hormones
- Surgeries -> Structural & Soft Tissue

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Surgeries Structural

Methods:

- Osteotomy
- Osteotomies with refixation in new position
- Osteoplasty by burring/rasping
- Alloplastic augmentation (silicone, medpore)
- Autologous augmentation (bone from separate site vs. cadaveric)
- Cartilage excision, reshaping, repositioning
- 3D Virtual surgical planning (CPT 76377)

Intent:

- Alteration of vertical (ver), horizontal (hor) or antero-posterior dimensions (ap).
- Either through augmentation (aug) or reduction (red).



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Soft Tissue Surgeries

Methods:

- Skin, fat excision
- Liposuction
- Fat grafting, fillers
- Adjacent tissue transfer

Intent:

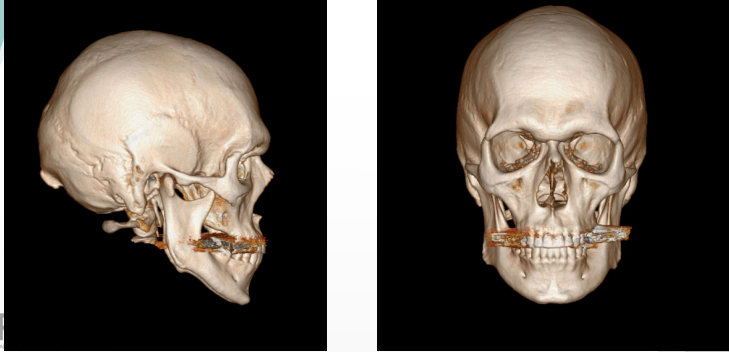

- Reverse iatrogenic soft tissue ptosis
- Augment by addition of volume in certain areas (e.g. lips, cheeks)



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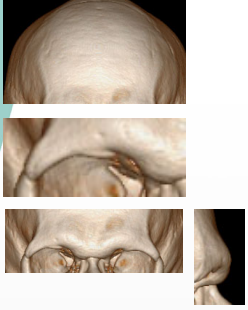
Surgeries Structural

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Structural Surgeries Upper Third



Osteoplasty forehead	CPT Codes
Frontal bone reduction a/p	21209
Temporal crest reduction	21137
Orbital rim red (a/p + ver)	Modifier 22
Zygomaticofrontal red (ap)	

Osteotomy forehead	CPT Codes
Frontal sinus set back	21139




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Soft Tissue Surgeries Upper Third

Forehead feminization	CPT Codes
Brow lift	67900
Reduction of forehead height (ver)	14021, 14060, 14301, 14302


Others	CPT Codes
Blepharoplasty Upper	15822
Blepharoplasty Lower	15822
Fat grafting (temporal)	15773
Temporal augmentation	15773
• Fatgrafting	15770
• Dermal grafts	21208
• Alloplastic	



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Structural & Soft Tissue Middle Third



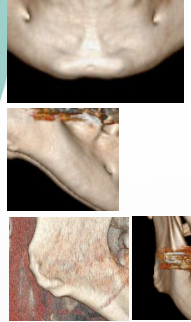
Cheek Augmentation	CPT Codes
Midface osteotomies (rare)	21188, 21141-7
Cheek implant	21270
Fatgrafting	15773

Nose and upper lip	CPT Codes
Rhinoplasty Incl. cartilage harvest	3400/10/20 20912, 21235
Septoplasty	30520, 30465
Liplift (red ver)	14060-1
Fat grafting	15773
Rhytidectomy	15828-9

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Structural Surgeries Lower Face



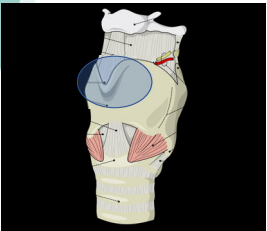
Chin	CPT Codes
Genioplasty aug vertical (graft/prosth)	21120
Genioplasty, sliding (ap)	21121
Genioplasty, multiple (ap/hor)	21122

Jawline (bilateral modifier 50)	CPT Codes
Mandibular bone ostectomy (ver/hor)	21025, 21193
Mandibular osteoplasty (ver/hor)	21209
Liplift (red ver)	14060-1
Liposuction neck	15876
Rhytidectomy	15828-9

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Structural Surgeries Neck



Larynx	CPT Codes
Laryngeochondroplasty	31750, 31599
Voice Feminization	31599

Wikipedia

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Chest Feminization Surgery

Indication:
AMAB (assigned male at birth) individuals with gender dysphoria due to insufficient breast tissue.

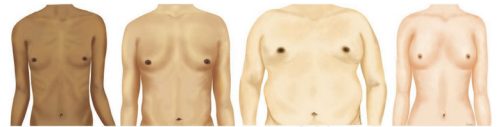


Fig. 1. Illustration of all 3 body type classifications in transgender patients, compared with the most common cis-mesomorph body type.

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Nauta AC et al. Differences in Chest Measurements between the Cis-female and Trans-female Chest Exposed to Estrogen and its Implications for Breast Augmentation. *Plast Reconstr Surg Glob Open*. 2019 Mar 13;7(3):e2167.

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Chest Feminization

Mammoplasty (MP)	CPT Codes
Mammoplasty with implant	19325
Mammoplasty with fat grafting	20926
Capsulotomy, capsulectomy	19370, 19371
Use of acellular dermal matrix (capsular contracture)	15777
Immediate breast implant at time of mastopexy, mastectomy, or reconstruction	19340
Delayed insertion of breast implant	19342
Tissue expander in breast reconstruction	19357
Hair removal	17380, 17999

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Orchiectomy isolated

Indication:

AMAB (assigned male at birth) individuals with gender dysphoria who undergo removal of gonads

May proceed with genital surgery at later date (scrotoectomy may be performed)

Fertility counseling, if appropriate, provided.

Orchiectomy	CPT Codes
Orchiectomy	54530, 54520, modifier 50
Scrotoectomy	55150

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Feminizing Genital Surgery

Indication:

AMAB (assigned male at birth) individuals with gender dysphoria who undergo creation of a vulva and/or vagina.

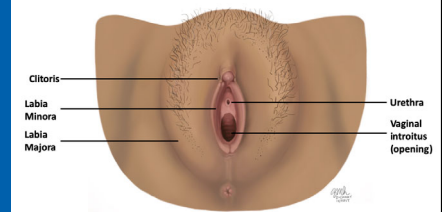
(The following slides courtesy of Oregon Health & Science University Department of Urology)

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Vulva Defined—Outer anatomy

Parts of the Vulva

- Opening to Vagina = internal canal
- Labia = inner and outer skin folds
- Clitoris = erectile tissue at the top of vulva
- Urethra = opening for urine to exit the body

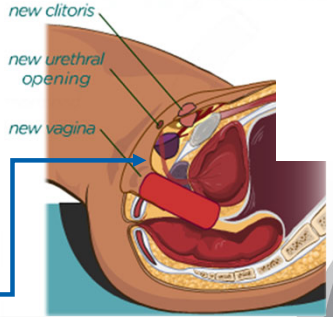


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Vaginoplasty Procedure

Inversion of the penis skin tube

The vagina is inserted into the space between the bladder and rectum, and cuts are made to expose the clitoris and urethra in their correct positions.



Vagina with stent inside

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Images created by Rebecca Betts

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Vaginal Canal – Lining Options

Penile inversion vaginoplasty (open/perineal)

- Full thickness skin graft uses penile/scrotal tissue as preferred option

Robotic peritoneal flap vaginoplasty

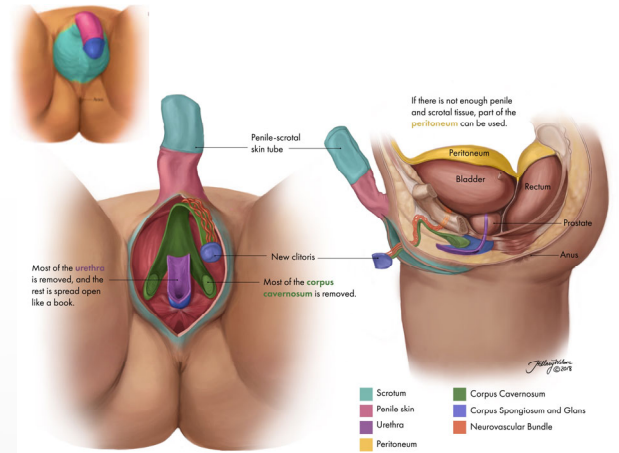
- Still uses penile/scrotal tissue
- While some moisture is created by peritoneum, it's not adequate for self lubrication for sexual activity

Colon

- Colonic flap used for vaginal lining, self moisturized, can have odor, higher morbidity.
- Usually reserved for complex revision surgeries.

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Pelvic Floor Physical Therapy

- Pelvic floor is system of muscles that support urethra, bladder, rectum
- Space for vagina made through these muscles
- Physical therapist who specializes in this part of the body
- Will teach awareness and how to relax muscles that surround entrance to vagina
- Helpful to make dilation easier

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CPT Codes – Vulvoplasty / Vaginoplasty

Tissue Transfer	CPT Codes
Hair removal	17380, 17999
Adjacent tissue transfer	14041, 14301-2
Full thickness skingraft for lining	15240-1
Island pedicled flap (glansplasty flap)	15734, 15740, 15750
Tissue grafts (incl. peritoneal graft)	20926
Urethroplasty	53430
Penectomy	54120, 54125
Orchiectomy	54520, 54530
Introital repair	56800
Clitoroplasty	65805
Construction of vagina, without and with graft	57291-2, 57335
Robotic peritoneal flap vaginoplasty	57355, 49329, 52900
Scrotoectomy	55150
Colpopexy	57425
Intersex surgery	55970

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Chest Masculinization Surgery

Indication:
AFAB (assigned female at birth) individuals with gender dysphoria who undergo mastectomy (and/or additional chest contouring procedures such as liposuction) and/or nipple reconstruction.

Monstrey, Stan M.D., Ph.D. et. al. Chest-Wall Contouring Surgery in Female-to-Male Transsexuals: A New Algorithm, Plastic and Reconstructive Surgery: March 2008 - Volume 121 - Issue 3 - p 849-859

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Chest Masculinization

Chest Masculinization including nipple areolar complex (NAC)	CPT Codes
Free full thickness skingraft (NAC)	15200-1
Mastectomy	19303, 19304
Reduction Mammoplasty	19318
NAC reconstruction to masculinize feminine NAC	19350
Adjacent tissue transfer chest	14000-1
Liposuction of chest	15877
NAC tattoo	11920-11922

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Courtesy: Scott Mosser

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Hysterectomy – Salpingo - Oophorectomy

Indication:
AFAB (assigned female at birth) individuals with gender dysphoria who undergo removal of uterus and ovaries either in preparation for genital surgery or in isolation*.
Fertility counseling, if appropriate, provided.

	CPT Codes
Hysterectomy (depending on technique and additional comorbidities) +/- oophorectomy	58XXX

There may be additional medical reasons for hysterectomy/oophorectomy unrelated to gender dysphoria. The correlation of this procedure with gender dysphoria should not result in a reduction or denial of care/coverage

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Masculinizing Genital Surgery

Indication:
 AFAB (assigned female at birth) individuals with gender dysphoria who undergo creation of a phallic structure either by local tissue (plus buccal graft) known as a Metoidioplasty; or by using a combination of local tissue and distant tissue known as a Phalloplasty.

Overlapping CPT codes are often used for masculinizing genital surgery. The next slide provides an overview of various procedural combinations (although combinations may vary between surgeons and depending upon clinical circumstances).

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Masculinizing Genital Surgery (cont.)

Specialty	Simple Metoidioplasty	Complete Metoidioplasty	Shaft Only Phalloplasty	Complete Phalloplasty
Vaginectomy	●	●	●	●
Perineal Urethroplasty		●	●	●
Shaft Urethroplasty				●
Clitoroplasty	●	●	●	●
Perineoplasty	●	●	●	●
Phallic Shaft adult dimensions			●	●
Glansplasty			●	●
Testicular implants	●	●	●	●
Erectile Devices			●	●
Monsoplasty	●	●	●	●

● Always
● Most often performed
● Based on clinical circumstances

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Metoidioplasty

```

    graph TD
      Q1["ADULT SIZE PHALLUS DESIRED?  
ABILITY FOR INTERCOURSE DESIRED?  
HIGHER CHANCE FOR ABILITY TO STAND TO URINATE?"]
      Q2["URINATION FROM GLANS CLITORIS DESIRED?"]
      Q3["SIMPLE METOIDIOPLASTY"]
      Q4["COMPLETE METOIDIOPLASTY"]
      P["PHALLOPLASTY"]

      Q1 -- NO --> Q2
      Q1 -- "IF ONE OF THOSE YES" --> P
      Q2 -- NO --> Q3
      Q2 -- YES --> Q4
    
```

Metoidioplasty may be converted to phalloplasty at later date

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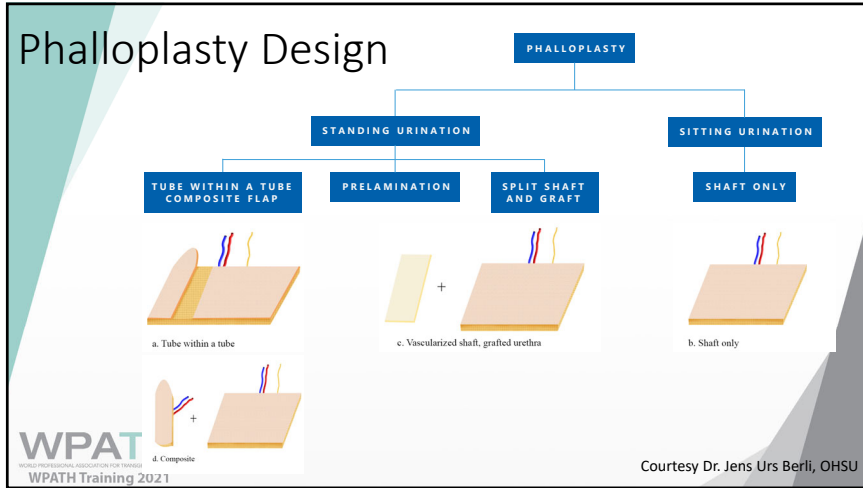
Phalloplasty Simplified

Three main factors determine the surgical path a patient will go when having phalloplasty:

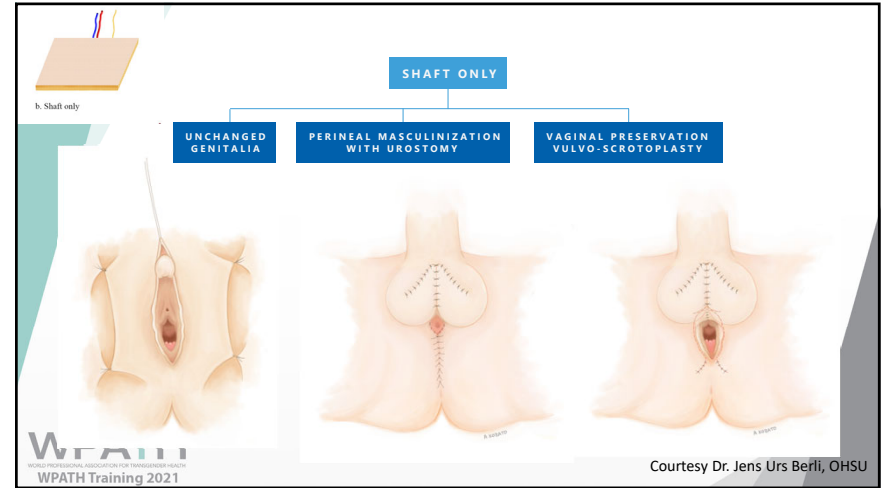
1. Design and composition of tissues
2. Where that tissue comes from
3. Number of stages*

The timing and number of stages may vary. Additional assessments are not required for staged/related/revision procedures

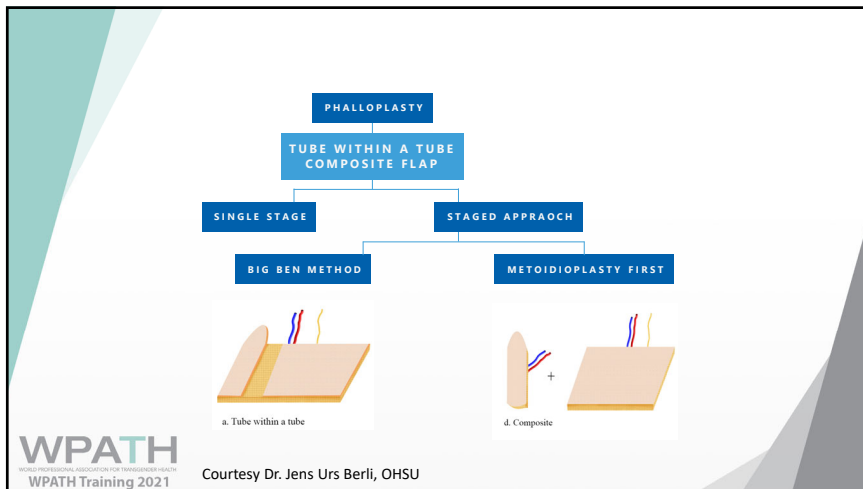
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- ### Phalloplasty Donor Sites
- Forearm
 - Thigh
 - Lower Abdomen / Groin
 - Back (rare)
 - Others
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Courtesy Dr. Jens Urs Berli, OHSU

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Phalloplasty Staging

PROCEDURE	STAGE 1	STAGE 2	STAGE 3	STAGE 4
Classic Phalloplasty	Soft tissue and urological reconstruction	Testicular implants +/- erectile implants		
UK Technique (Dr. Nim)	Creation of neophallus + shaft urethra	Perineal masculinization +/- glansplasty	Testicular implants +/- erectile implants	
Metoidioplasty First	Complete metoidioplasty	Creation of shaft and shaft urethra	Testicular implants +/- erectile implants	
Grafted Urethra	Variety of ways	Variety of ways	Variety of ways	Testicular implants +/- erectile implants

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Danker S, Esmonde N, Berli JU. "Staging" in Phalloplasty. Urol Clin North Am. 2019 Nov;46(4):581-590. doi: 10.1016/j.ucl.2019.07.011. PMID: 31582031.

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CPT Codes – Tissue Transfer/Rearrangement

Tissue Transfer	CPT Codes
Adjacent tissue transfer	14040-1, 14301-2
Split thickness skingraft	15100-1
Full thickness skingraft	15220, 15240
Buccal graft	15115
Skin substitute	15273-4
Fasciocutaneous flap (+/- nerve)	15734, 15738, 15740, 15750 (+ mod 22)
Formation tubed, pedicled flap	15574
Free flap, fasciocutaneous	15751, 15757 (+mod 22)

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CPT Codes – Genital Procedures

Tissue Transfer	CPT Codes
Hair removal	17380, 17999
Slit Meatoplasty	53020
Scrotoplasty	55180
Labioplasty	56620
Vulvectomy	56625
Clitoroplasty	56805
Perinoplasty	56810, 13130-3
Vaginectomy	57110
Colpocleisis	57120
Urethroplasty	53010, 53400, 53405, 53410, 53415, 53410, 53450, 54348, 54352, 54360
Testicular implants (placement and removal)	54660, 55120, 55180
Erectile Devices (placement and removal)	54440, 54405, 54406, 54410, 54415, 54660

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CPT Codes – Other Procedures

Tissue Transfer	CPT Codes
Suprapubic catheter	51102, 51703
Cystoscopy/urethroscopy	52000, 52281
Nerve surgeries	64857, 64856, 64859, 64910
Monsplasty	15839
Fat Grafting	15773
Vacuum assisted wound dressing	97606
Panniculectomy (if pannus/mons precludes phalloplasty)	15830
Gracilis flap	15738
Intersex surgery	55980

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