

Genital Gender Affirming Surgery: Pre & Post Op Surgical Assessment

Michele "Mike" Fascelli, MD (he/him)
Cleveland Clinic, Associate Staff, Department of Urology
Center Director of LGBTQIA+ Urologic Care and Genital Gender Affirming Surgery



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Brief Preamble

- No disclosures
- Photo credit to my colleagues and mentors:
 - Daniel Dugi, Geolani Dy, Blair Peters, Jens Berli & Cecile Ferrando
- Please no recording or sharing of these slides
 - I do have confidential genital photos



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Objectives

- To describe WPATH Surgical Criteria
- To discuss common pre & post-operative requirements
 - Focusing on "bottom" surgery
 - What does bottom surgery look like?
- To identify common concerns that can be bridged by medical/mental health providers



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WPATH SOC8 – Sept 2022

- It's pushing the needle in the right direction
- A LOT of information was included
- It's piecemeal
 - Eligibility criteria in Assessment chapters
 - Specifics regarding Surgery in the later chapters



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24 FEBRUARY 2023 AUANEWS

World Professional Association for Transgender Health Standards of Care 8: Update for Urology



Liem Snyder, MD (they/them)
University of Utah, Salt Lake City

Jeffery Lin, MD (he/him)
University of Washington, Seattle

Michele Fascelli, MD (he/him)
Oregon Health and Science University, Portland

Table. Comparing Major Changes in Terminology, Preoperative Considerations, and Surgical Factors Between World Professional Association for Transgender Health Standards of Care, Versions 7 and 8

	WPATH SOC8	WPATH SOC7
Terminology	Assigned female at birth Assigned male at birth	Female-to-male individuals Male-to-female individuals
Surgery	Gender-affirming surgery	Sex reassignment surgery
Gender incongruence must be...	Marked and sustained	Persistent, well-documented
Diagnosis prior to surgery	When necessary to access health care	Persistent, well-documented gender dysphoria
Social transition	No requirement recommended	12 mo continuously living in a gender role congruent with gender identity
Referrals/letters of support	If a letter is needed, 1 letter from a qualified health care professional is sufficient	2 referral letters from qualified mental health professionals for genital surgery are recommended
Reproductive effects	Patient understands effect of treatment on reproduction and has been offered/explored reproductive options	Discuss reproductive options prior to medical treatment for gender dysphoria
Gender-affirming hormone treatment	Stable on regimen, at least 6 mo or longer, if required for surgical result, unless hormone therapy is not in line with patient's goals or is contraindicated	12 mo continuous hormone therapy as appropriate to patient's gender goals
Individually customized affirming surgery	Utilize a multidisciplinary team of transgender health professionals to help counsel and inform shared decision-making	Not in guidelines
Follow-up after gGAS	Lifelong urological follow-up after metoidioplasty and phalloplasty Regular speculum exams after vaginoplasty and prostate exam as necessary	Regular screening according to age-related guidelines

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Chapter 5 – Assessment of Adults

- 5.3 - We recommend HCP assessing TGD adults for medical and surgical treatment:
 - Only recommend GAMT requested by the patient when marked, sustained
 - Ensure diagnostic criteria have been fulfilled
 - Exclude other causes of gender incongruence
 - Ensure mental and physical health conditions are assessed and impact on these conditions included in R/B discussion
 - Ensure capacity to consent and understand effect of treatment, particularly on reproductive options
 - Consider the role of social transition
 - *A single opinion from a HCP should suffice*
 - *Prior to gonadectomy, minimum 6 months of HRT*
 - *Detransition prompts comprehensive multidisciplinary assessment*



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Chapter 13 – Surgery and Post Op Care

- 13.1 - Surgeons have specific credentials:
 - Training, documented supervision
 - Maintenance of an active practice
 - Knowledge about gender diverse identities/expressions
 - Continuing education in the field
 - Tracking of surgical outcomes
- 13.2 - Breast cancer risks be assessed prior to top surgery
- 13.3 - Inform patients about aftercare, travel/accommodations, importance of post-op follow up during preop process
- 13.4 - Reproductive options be discussed
- 13.5 - Consider offering gonadectomy at minimum 6 months HRT



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- 13.6 - Consider GAS for adults when evidence of stability on their current treatment regimen exists
- 13.7 - Consider GAS for adolescents when multidisciplinary evidence includes mental health and medical professionals
- 13.8 - Consult comprehensive multidisciplinary team individually customized or "non-standard" surgeries are part of a GAS plan
- 13.9 - Lifelong urologic follow up after metoidioplasty/phalloplasty
- 13.10 - Individuals after vaginoplasty should follow up with their primary surgeon/PCP/gynecologist
- 13.11 - Patient regret should be managed by multidisciplinary team



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ORIGINAL ARTICLE

Concordance of National Insurance Criteria with WPATH Standards of Care for Gender-Affirming Surgery

Diaddigo, Sarah E. BS; Lavalley, Myles N. BS; Asadourian, Paul A. MEng, MD; Feuer, Grant B. BS; Warner, Paige E. BS; Rohde, Christine H. MD, MPH

PRS Online

Plastics Surgery Colleagues from Columbia Univ.

- 95% of plans still require 12-month HRT prior to surgery
- 95% of plans still require 2-3 letters of referral
- Ongoing limited coverage of nipple reconstruction
- Facial surgery is rarely covered
- Revision surgery is covered less than 25%



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Bottom-Specific Criteria

- LOTS of nuance – even to get a consult!
 - All surgeons are different
 - Call center/intake
 - Insurance status
 - Letters
 - Hair removal
- Is this all gatekeeping?
 - What information is available to patients?
- Informed patients exp better outcomes
 - "Surgery class" - Poceta et al. 2019.



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When a surgeon sees the patient...

- History: medical, surgical, social, familial
 - Smoking cessation counseling
 - Fam hx and screening risks
 - Mental health history
 - Needs for support
 - Sexual and reproductive history
 - Pelvic health/screenings, vaccines (HPV), HIV screening/PrEP

Some of the major gaps in PCP for TG patients can be addressed by any provider Edmiston et al 2016



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Physical Exam

- Prepare patients for their physical exam
- Assess hair removal status
 - Important for vaginoplasty
 - Creation of the urethra during phalloplasty
 - Do alternatives exist? Are they safe?
- Assess existing structures – their status and considerations
 - Vasculature, piercings, etc
 - Body habitus / BMI





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[AMA J Ethics. 2023 Jun 1;25\(6\):E398-406. doi: 10.1001/amajethics.2023.398.](#)
BMI **Patient-Centered Approaches to Using BMI to Evaluate Gender-Affirming Surgery Eligibility**
[AMA J Ethics. 2023 Jul 1;25\(7\):E496-506. doi: 10.1001/amajethics.2023.496.](#)
Should BMI Help Determine Gender-Affirming Surgery Candidacy?
[Plast Reconstr Surg Glob Open. 2019 Mar;7\(3\):e2611. doi: 10.1097/GOX.0000000000002611. eCollection 2019 Mar.](#)
Evaluation of BMI as a Factor in Gender-Affirming Surgery Eligibility
[Int J Transgend Health. 2021 Mar 1;23\(3\):355-361. doi: 10.1080/26895269.2021.1890302. eCollection 2022.](#)
Gender-affirmation surgery and bariatric surgery in transgender individuals in The Netherlands: A cross-sectional study of techniques and outcomes
[Transgend Health. 2021 Jun 2;6\(3\):121-124. doi: 10.1089/trgh.2020.0068. eCollection 2021 Jun.](#)
HIGH BODY MASS INDEX AND GENDER-AFFIRMING SURGERY: A Systematic Review
[Transgend Health. 2021 Jun 2;6\(3\):121-124. doi: 10.1089/trgh.2020.0068. eCollection 2021 Jun.](#)
Body Mass Index Requirements for Gender-Affirming Surgery: A Systematic Review
[Transgend Health. 2021 Jun 2;6\(3\):121-124. doi: 10.1089/trgh.2020.0068. eCollection 2021 Jun.](#)
Outcomes of penile inversion vaginoplasty and robotic-assisted peritoneal flap vaginoplasty in obese and nonobese patients
[Urology. 2023 Jun;102:103-109. doi: 10.1016/j.urology.2023.03.015. eCollection 2023 Jun.](#)
 Omer Acar ¹, Jonathan Alcantar ¹, Alexandra Millman ², Ushasi Naha ¹, Juan Diego Cedeno ³, Luca Morgantini ¹, Ervin Kocjancic ⁴
 Affiliations [+ expand](#)
 PMID: 36465025 DOI: [10.1002/nau.25077](https://doi.org/10.1002/nau.25077)

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BMI
 Need better gender affirming specific long-term outcomes
 More centers offering consultation and discussion about risks of BMI/body habitus
 Work in progress

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At the appointment

- Personalized surgery
- Multidisciplinary care Karasic and Lin 2018
- Discuss what you can and can't do
 - *Shared decision making*
 - Patients must know what the surgeon has and has not done
- Risk discussion
- Aftercare plan



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Vaginoplasty

Zero Depth or Vulvoplasty

- No hair removal
- No canal for penetration

Penile Inversion

- Hair removal required
- No abdominal surgery

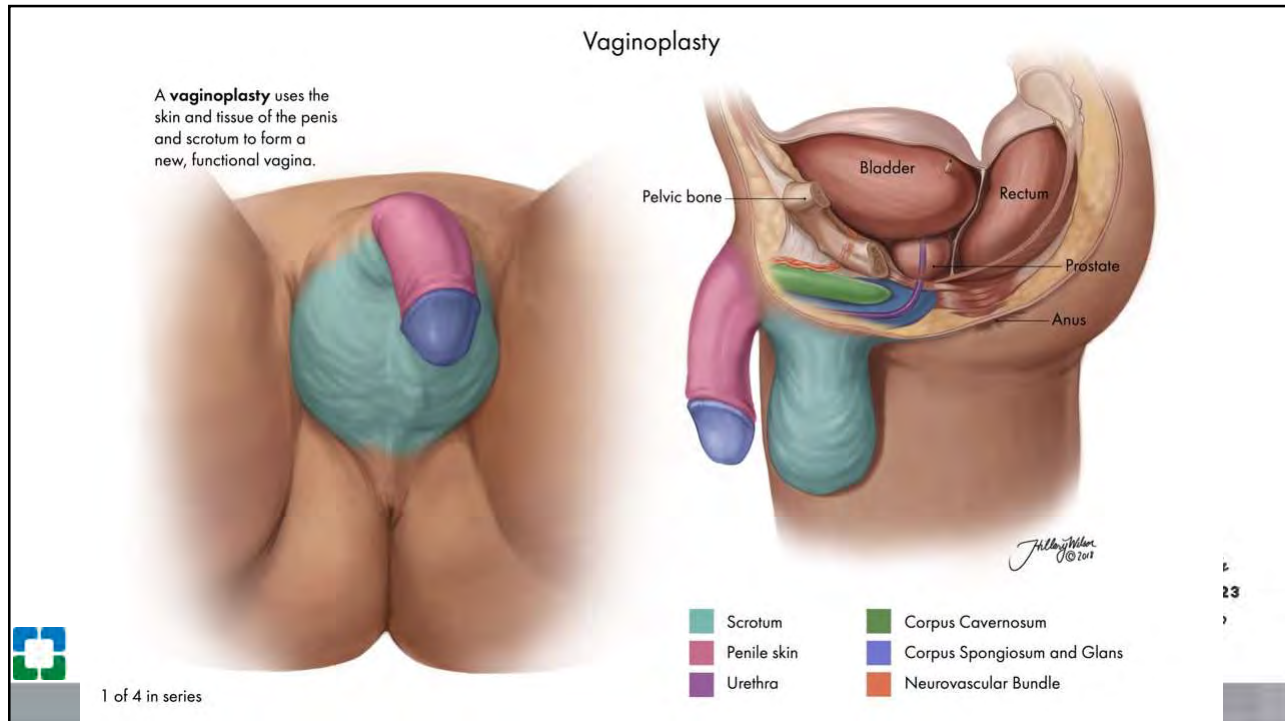
Robotic Peritoneal or "Pull Through"

- Hair removal required
- Limited genital skin
- Good for recovering depth

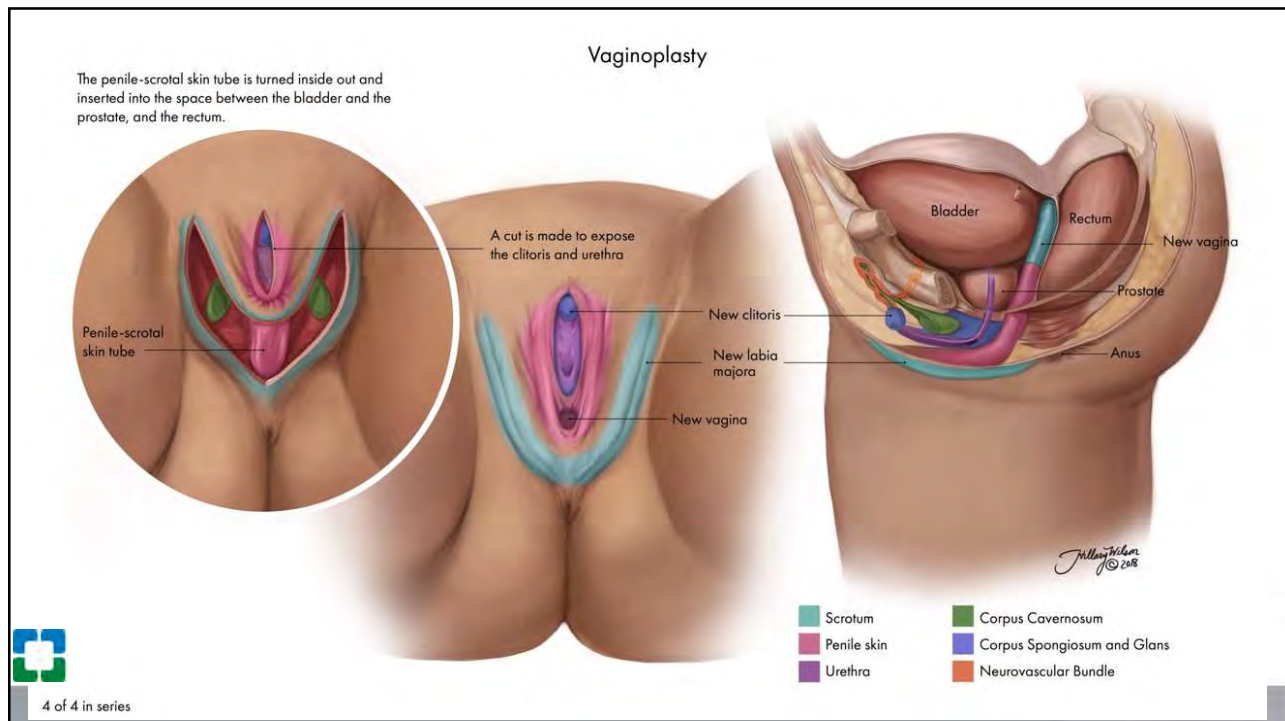
Bowel (colon, sigmoid, etc)

- Most complicated
- Need colonoscopy
- See colorectal surgeon

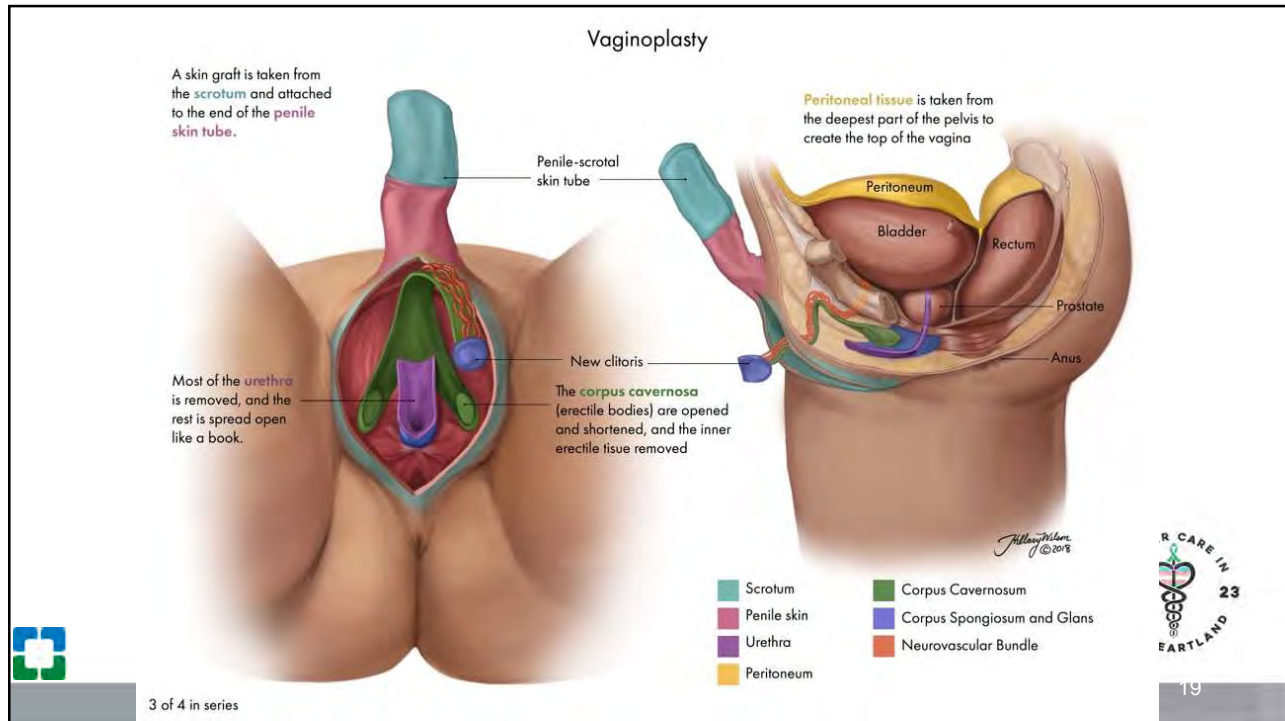
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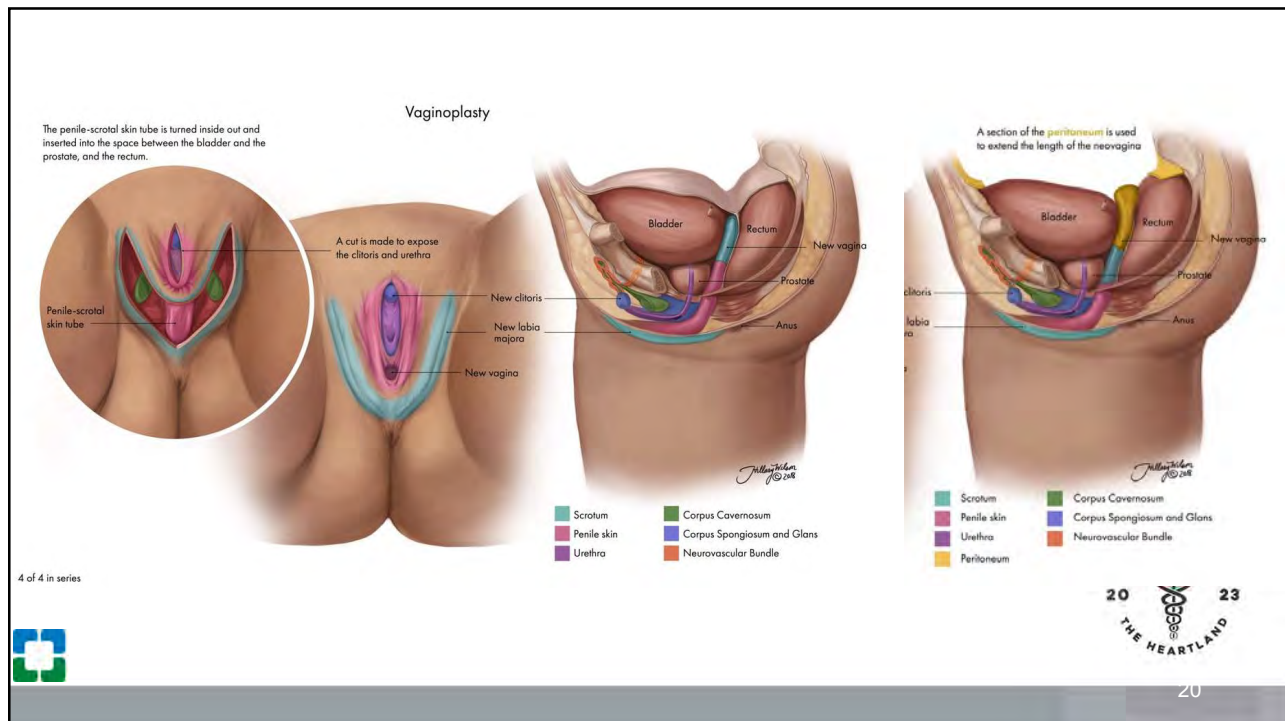
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Vaginoplasty Steps

The first diagram shows a dorsal view of the male torso with blue lines marking the skin for flap harvest. The second diagram shows the removal of the testis (orchiectomy) with surgical instruments. The third diagram shows the degloving process, where the penile skin is being separated from the underlying tissue.

Skin marking **Orchiectomy** **Degloving**

CCF © 2017 CCF © 2017 CCF © 2017

THE HEARTLAND

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Vaginoplasty Steps

The first diagram shows the initial dissection of the canal. The second diagram shows the canal being widened and deepened. The third diagram shows the final canal dissection with the new vaginal opening.

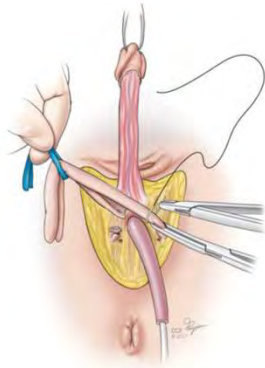
Canal Dissection


CCF © 2017 CCF © 2017 CCF © 2017

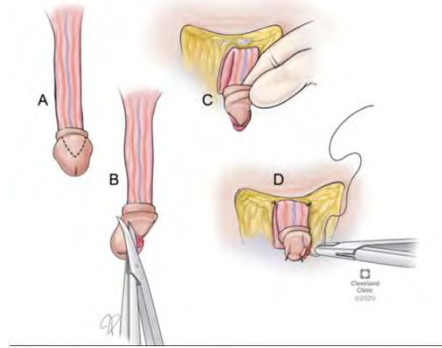
20 THE HEARTLAND 23

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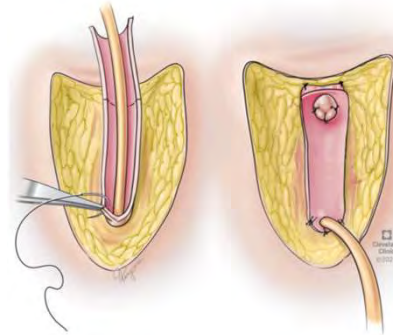
Vaginoplasty Steps



 Penile disassembly



Neurovascular bundle isolated and neoclitoris created

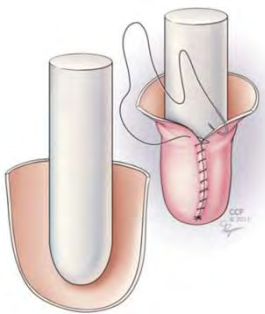



Mucosal urethral plate and urethroplasty

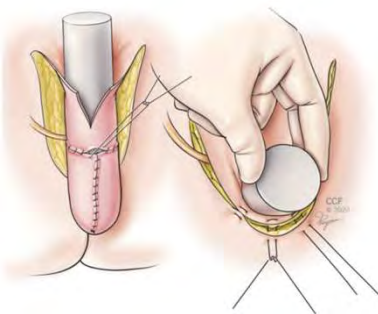


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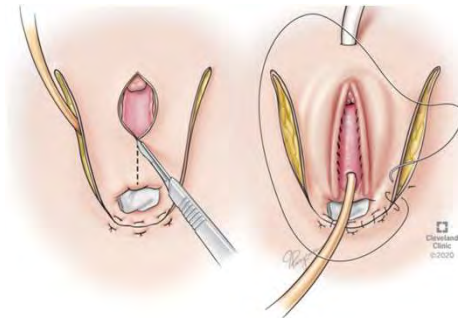
Vaginoplasty Steps



 Vaginal canal lining from scrotal skin



Canal sutured to penile skin tube and set in place

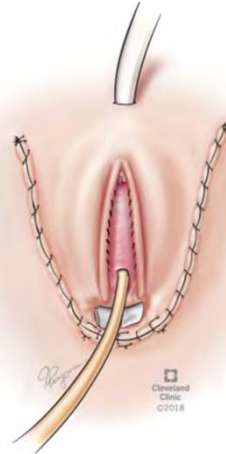


Labiaplasty and creation of clitoral hood



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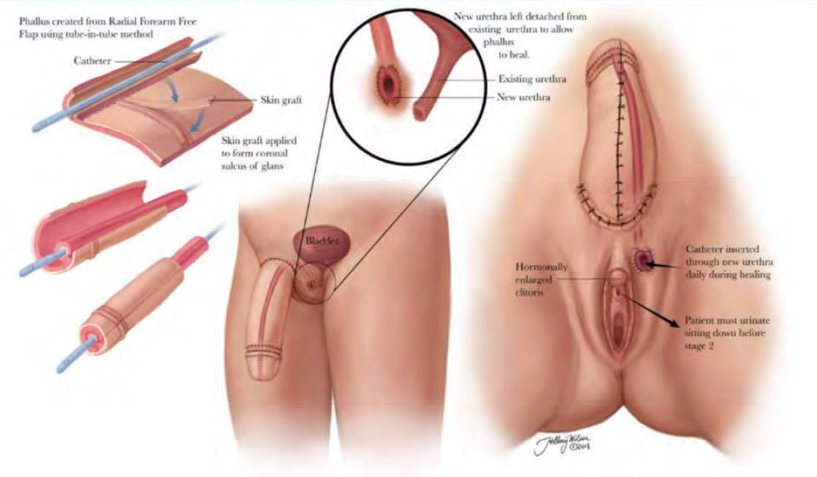
Vulvar Appearance Intraoperatively



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Phalloplasty

Forearm Flap Phalloplasty Stage 1: Phallus creation

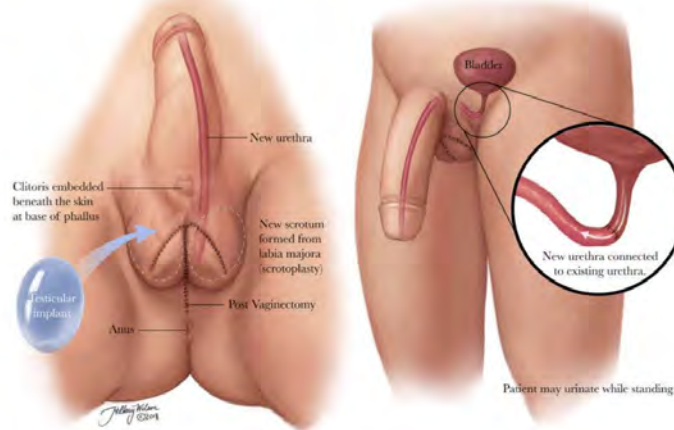


Johns Hopkins Phalloplasty for Gender Affirmation

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Phalloplasty

Forearm Flap Phalloplasty Stage 2: Urethral lengthening and scrotoplasty

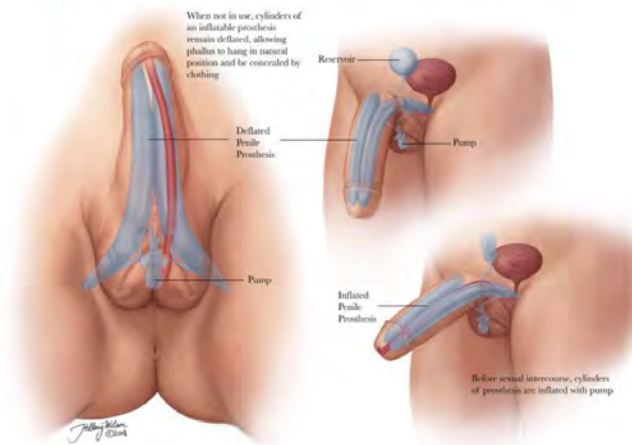


Johns Hopkins Phalloplasty for Gender Affirmation

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Phalloplasty

Forearm Flap Phalloplasty Stage 3: Penile Prosthesis



Johns Hopkins Phalloplasty for Gender Affirmation

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Alternative Constructions

Shaft Only – Vaginal Preservation



Shaft Only – Perineal Urethrostomy



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Bottom Surgery Risks



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Risks & Complications

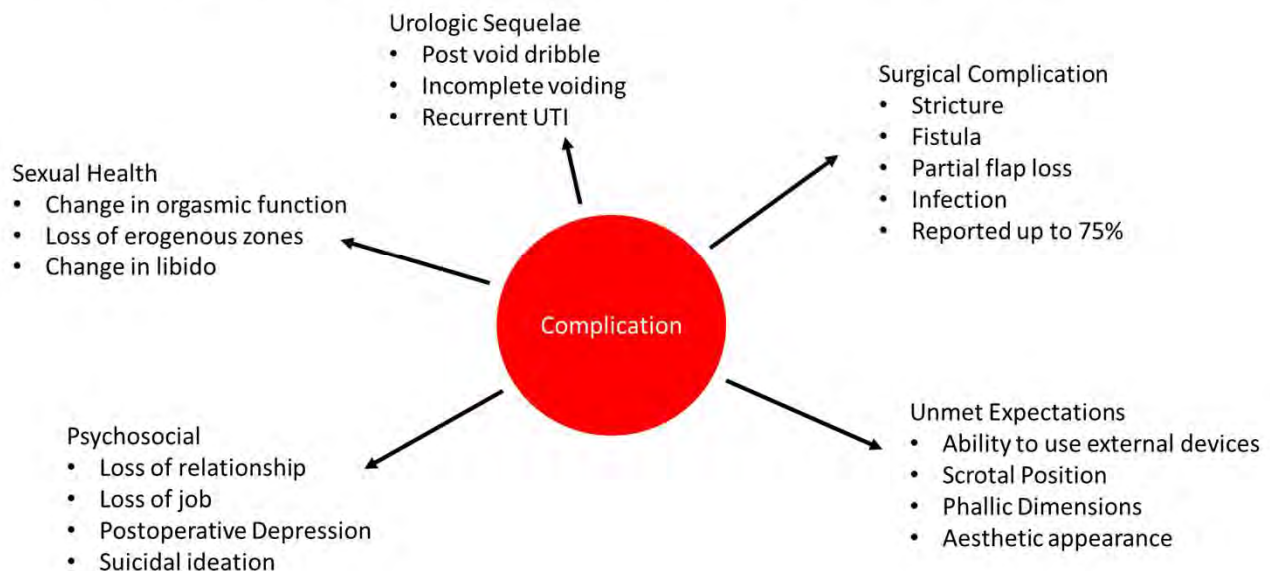
- Bleeding*, pain
 - Urethral vs vaginal
- Wound healing: separation, granulation tissue
- Post op urinary retention, abnormal urine stream, UTI
- Delay or change in sensation
- Pelvic floor dysfunction
- Cosmetic concerns
- Psychosocial impact
- Flap necrosis, vaginal stenosis*, fistula



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Examples of Complication in Phalloplasty



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Common Post Op Concerns

- Bleeding/bruising/swelling/scabbing
- Wound separation
- UTIs
- Granulation tissue
- Aesthetic concerns
- Changes in mental health*

- Vaginoplasty specific: trouble with dilation
- Phallo specific: partial flap loss/necrosis



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Where can we work to bridge the gap?

- Identify champions in multi-disciplinary teams
- Improve access to patient and provider education
- Study patient outcomes
 - Particularly the "medicalization" of patients' genitals
- Improve communication with clear expectations

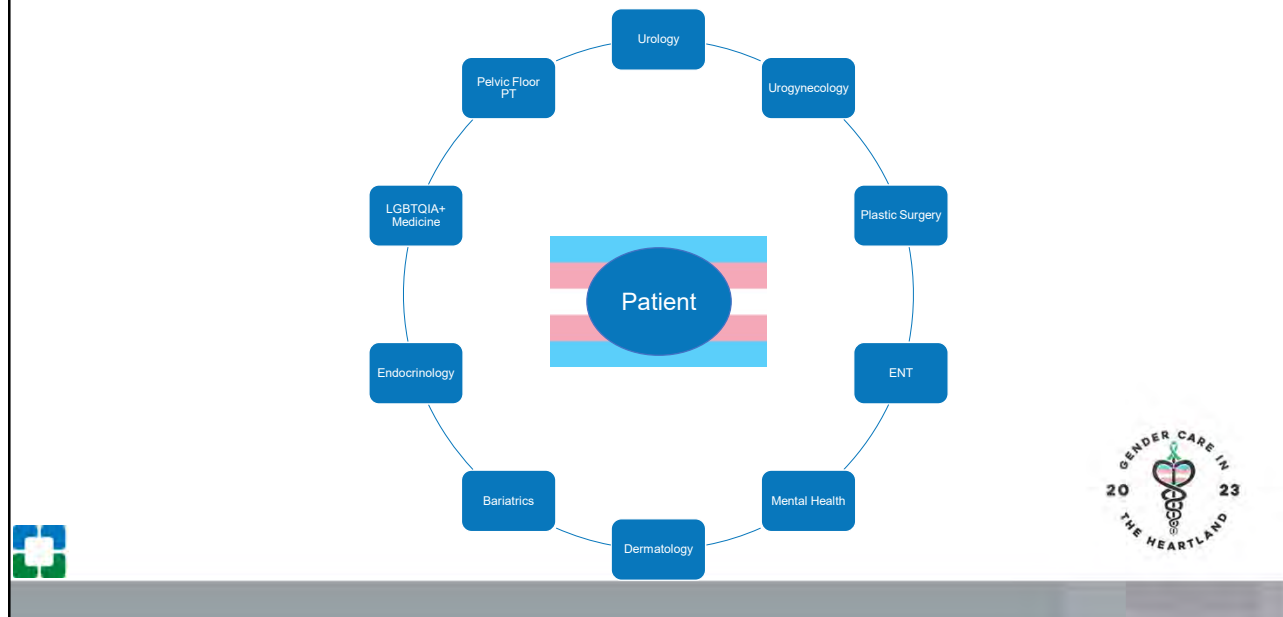
Karasic and Fraser 2018; Schechter 2016

 - Pre-op input
 - Inpatient care paths
 - After hours lines for care questions
 - Trans specific on call provider
 - Post-op instructions delineating pathways



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Collaborative TG Care



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Questions?



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