W31: ICS Institute - School of Transgender Health: Update in Trans female health care

Workshop Chair: Ervin Kocjancic, United States
05 September 2019 14:00 - 17:00

Start	End	Topic	Speakers
14:00	14:05	Introduction	Ervin Kocjancic
14:05	14:20	DEFINITION AND WPATH STANDARDS	Loren Schecter
14:20	14:50	ROLE OF PHYSICAL THERAPY IN GENDER CONFIRMATION SURGERY	Bary Berghmans
14:50	15:20	PERI OPERATIVE MANAGEMENT OF GENDER CONFIRMATION SURGERY	Loren Schecter
15:20	15:50	Break	None
15:50	16:20	VAGINOPLASTY	Ervin Kocjancic
16:20	16:40	VAGINOPLASTY COMPLICATIONS: MANAGEMENT AND PREVENTION	Loren Schecter
16:40	16:55	WHEN THE SKIN IS NOT ENOUGH; ALTERNATIVES TO PENILE INVERSION TECHNIQUES	Ervin Kocjancic
16:55	17:00	Questions	All

Aims of Workshop

To inform about indications, surgical possibilities and limits of confirmation surgery in gender dysphoria.Particular attention will be given to Trans female surgery

Learning Objectives

Familiarize with the current WPATH terminology

Target Audience

Urology, Urogynaecology, Conservative Management

Advanced/Basic

Basic

Suggested Learning before Workshop Attendance

www: wpath.org.

Definition and WPATH Standards:
Loren Schecter

This course will review current surgical strategies for treatment of gender dysphoria for transfeminine individuals. This includes a discussion of transfeminine genital surgery (vaginoplasty) as well as strategies for treatment of gender-diverse and gender-expansive individuals (including language and surgical options). A review of WPATH, Standards of Care 7 (SOC 7) as well as topics for update in SOC 8 will be discussed. There will be an emphasis on the importance of a multi-disciplinary approach to patient care.

Role Of Physical Therapy In Gender Confirmation Surgery
Bary Berghmans, PhD MSc RPT associate professor

Jiang et al. (2019) define gender dysphoria as the strong and persistent distress an individual experiences as a result of a mismatch between their sex assigned at birth and their gender identity. The objective of surgery, such as vaginoplasty, is to create natural-appearing genitalia for transgender women. Pelvic physiotherapy for patients undergoing gender-affirming surgeries may support patients to decrease or resolve pelvic floor dysfunctions that are highly prevalent in these patientpopulations. Pre-operative physiotherapy can help to identify potential pelvic floor health problems. Recent literature indicates that patients with a history of abuse have a high rate of preoperative pelvic floor problems. In the assesment these facts need to be taken into account as potential predictive and/or prognostic factors. The rate of resolution of pelvic floor and bowel dysfunction by the first session after the surgery was reported to be about 70%. Physiotherapists should use the International Classification of Functions to implement and execute an adequate and effective program in this exciting field of conservative management for transgenders. Jiang et al. (2019) highlight the fact that genital-affirming surgery results in significant changes of pelvic floor anatomy and that postoperative dilitation of the new vagina needs the patient to adapt to this new complex situation and circumstances. To guide these patients require a very empathic and holistic view and professional attitude of the physiotherapist with elements and components of physical, psychological, sexological and socio-cultural management. This presentation will deal with assessment, evaluation and intervention related to the consequences of pelvic floor health problems in transgender women.

References:
Jiang DD, Gallagher S, Burchill L, Berli J, Dugi D 3rd.Implementation of a Pelvic Floor Physical Therapy Program for Transgender Women Undergoing Gender-Affirming Vaginoplasty. Obstet Gynecol. 2019 May;133(5):1003-1011. doi: 10.1097/AOG.0000000000003236.

Perioperative Management
Loren Schecter

Pre- and post-operative care of patients undergoing vaginoplasty will be reviewed. This includes the role of the multidisciplinary team, the role of pelvic physical therapy (including strategies and protocols for dilation, hygiene, and pelvic floor relaxation), risk reduction strategies for venous thromboembolism, and managing patient goals and expectations.

Vaginoplasty
Ervin Kocjancic

The core surgical interventions that are applied within the context of trans women are; facial feminizing surgery, voice surgery and chondrolaryngoplasty, breast augmentation, and orchiectomy, penectomy and vaginoplasty. Vaginoplasty, which is the last step of the transition process, depicts the construction of a vagina that resembles a biological vagina in form and function. This procedure includes orchiectomy (can be performed as a first stage procedure before vaginal reconstruction), amputation of the penis, creation and lining of the neovaginal cavity, reconstruction of the urethral meatus and construction of the labia and clitoris.

In transgender vaginoplasty, surgical techniques can be divided into three main categories according to the nature and origin of the tissue(s) used for reconstruction: skin grafts; penile-scrotal skin flaps (penile skin inversion technique); and pedicled small or large bowel segments (intestinal vaginoplasty)

The main goals of vaginoplasty are to achieve an esthetically and functionally ideal perineogenital complex that will satisfy the patient. The neovagina should be moist, elastic and hairless with a depth of at least 10 cm and a diameter of 3-4 cm. The clitoris should be small, obscured and sensitive enough to enable complete arousal. Labia minora and majora should resemble the female vulva as much as possible. Innervation of the new genitalia complex should be functionally intact in order to offer a satisfactory level of erogenous stimulation during sexual intercourse. Transwomen who prefer an esthetic outcome without a functional vagina can undergo a vulvoplasty without vaginoplasty.

Penile skin inversion technique is the most investigated and therefore the most evidence-based technique for vaginoplasty. Herein; the inverted penile skin on an abdominal or more inferior pedicle is used as an outside-in skin tube for the lining of the neovagina. Preserved vascularization of the penile skin, its mobility, non-hair-bearing surface, sensate nature, thin connective tissue and relatively minimal tendency to contract represent the main advantages of using penile skin-based flaps. In cases where the penile skin is deficient (circumcision, micropenis etc.), several technical refinements can be applied such as combining the penile skin flap with scrotal and/or urethral flaps. Utilizing a perineal flap together with a scrotal graft in addition to penile skin may also serve well to lengthen the neovaginal cavity. Surgical outcome and sexual function associated with this technique are generally acceptable to good. Using additional urethral and penoscrotal flaps may provide benefit in terms neovaginal depth and lubrication.

Intestinal vaginoplasty is a viable alternative. Especially in cases where no redundant penile and/or scrotal skin is available for grafting, intestinal grafts provide a good alternative. Pedicled bowel segments can also be used when prior neovaginal reconstructive attempts with skin flaps and/or grafts failed in transgender patients. The need to elongate the vagina in transwomen requiring greater depth after a previous neovaginal construction is another indication to proceed with intestinal vaginoplasty. Overall, the outcome of vaginoplasty with pedicled bowel segments does not seem to be inferior to the penile skin inversion technique.

There is a need for prospective randomized studies with standardized surgical procedures, larger patient cohorts and longer follow-up period in order to make a valid comparison between the available vaginoplasty techiques and identify the “ideal” one.

Take home message: Penile skin inversion technique remains the method of choice for vaginoplasty in male to female transition.

References:

- Bizic MR, Stojanovic B, Djordjevic ML. Genital reconstruction for the trangendered individual. J Ped Urol 2017; 13: 446-452.
- Horbach SE, Bouman MB, Smit JM, Özer M, Buncamper ME, Mullender MG. Outcome of Vaginoplasty in Male-to-Female Transgenders: A Systematic Review of Surgical Techniques. J Sex Med. 2015 Jun;12(6):1499-512.
- Colebunders B, Brondeel S, D'Arpa S, Hoebeke P, Monstrey S. An Update on the Surgical Treatment for Transgender Patients. Sex Med Rev. 2017 Jan;5(1):103-109.
- Bouman MB, van Zeijl MC, Buncamper ME, Meijerink WJ, van Bodegraven AA, Mullender MG. Intestinal vaginoplasty revisited: a review of surgical techniques, complications, and sexual function. J Sex Med. 2014 Jul;11(7):1835-47.

Complications: Management and Prevention
Loren Schecter

Post-operative complications, including strategies for prevention and management of wound dehiscence, rectovaginal fistula, vaginal stenosis, and venous thromboembolism will be reviewed.