



Herpes neolabialis: herpes simplex virus type I infection of the neolabia in a transgender woman

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Abstract

A 24-year-old transgender woman consulted our outpatient clinic with a painful, itchy and red left labia. She underwent a penile inversion vaginoplasty 18 months before presentation. At physical examination of the left labia, erythema, edema and herpetic vesicles with ulceration were observed. A vesicle fluid swab was obtained and the presence of herpes simplex virus type I (HSV-1) was detected by PCR assay. Treatment consisted of oral valaciclovir (500 mg twice daily) for a total of five days. Topically-applied lidocaine cream (3%) was used for pain management. Treatment gave symptom relief in five days. At physical examination 14 days after symptom onset, there were no signs of active infection. To our knowledge, this is the first case report of HSV-1 infection of the neolabia in a transgender woman.

Keywords

Herpes simplex, herpes labialis, vaginoplasty, sex reassignment procedures, gender dysphoria, sexual behavior, sexually transmitted infection

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Introduction

Gender-confirming surgery is of importance for the psychological well-being and quality of life in transgender women.¹ The surgical creation of a neovagina in these patients is called vaginoplasty. The most frequently used surgical technique is the penile inversion vaginoplasty.² A neovaginal cavity is created between the bladder and rectum. Subsequently, the inverted penile skin is used as the inner lining of the vaginal cavity. A part of the glans penis is used to create the neoclitoris. The labia minora are constructed out of the penile preputial skin, and the labia majora out of the scrotal skin.²

Sexually transmitted infection (STI) and HIV have regularly been reported in transgender women, but mostly in non-western transgender women employed in the sex industry. To our knowledge, this is the first report of herpes simplex virus type I (HSV-1) infection of the neolabia in a transgender woman. The patient provided written informed consent for publication of this report.

Case presentation

A 24-year-old transgender woman, without co-morbidities, consulted our outpatient clinic with itchy and progressively more painful left labia over the course of three days. At the age of 17, she attended our Center of Expertise on Gender Dysphoria at the VU University Medical Center Amsterdam. At the age of 19, she started hormonal therapy, consisting of estradiol valerate 2 mg twice a day and cyproterone acetate 50 mg daily.

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She underwent penile inversion vaginoplasty at the age of 23, all in accordance with the International Standards of Care.³ She was in a monogamous relationship with a non-transgender man for six months, with whom she was sexually active. This included orogenital sexual contact and penetrative sexual intercourse. She had never engaged in commercial sex work. Both patient and partner had no conscious history of sexually transmitted infection (STI). Both had a history of cold sores.

At the time of presentation, she experienced itchy and very painful left labia, which had been present for three days (Figure 1(a)). She did not feel ill, nor did she have a fever. At physical examination, an edematous, erythematous lesion of approximately 4 × 1.5 cm with superficial vesicles was observed on the left labia. There were no signs of inguinal lymphadenopathy.

Differential diagnosis of genital vesicles comprises candida infections, lichen sclerosus, and STI. A vesicle fluid swab was obtained and the presence of HSV-1 was detected by PCR assay. No other STI tests were performed. Treatment consisted of oral valaciclovir (500 mg twice daily) for a total of five days. Topically-applied lidocaine cream (3%) was used for pain management. An overview of the course of disease is presented in Figure 1. The patient returned to our outpatient clinic six days after treatment initiation. She reported total symptom relief. At physical examination, there were no signs of active infection (Figure 1(d)). We provided sexual education and emphasized the necessity of sanitation and abstinence during active infection to prevent HSV transmission.⁴ At follow-up, three weeks after symptom onset, the patient reported no signs of infection and total symptom relief.

Discussion

In this case report, we described a transgender woman with symptomatic HSV-1 infection of the left neolabia. She presented with classical symptoms, similar to those known from the non-transgender population. Treatment with antivirals and topical analgesics resulted in symptom relief within five days. That viral STI can be found in the penile-inverted neovagina cavity, and may even cause symptomatic disease, that has been described before.^{5,6} To our knowledge, this is the first reported case of HSV-1 infection of the neolabia in a transgender woman.

Worldwide, the prevalence of genital HSV-1 infections in non-transgender persons appears to be increasing.⁷ In general, transgender women are an at-risk population for STI and HIV.⁸ Being employed in the sex industry is a major risk factor for STI exposure in this population. However, the prevalence of Dutch transgender women participating in sex work is low, when compared to other countries.⁹ The percentage of transgender women who have had penetrative intercourse one year after vaginoplasty is approximately 55%.¹⁰ It may be possible that Dutch transgender women engage less frequently in sexual risk behavior.

When compared to genital HSV-2 infections, HSV-1 infections are generally less severe and recur less often.^{7,11} In the non-transgender population, the risk of recurrence of one or more symptomatic genital HSV-1 infections in the first year is approximately 55–60%.⁴ The risk of recurrence is higher in cis women than in men. For the transgender population, these numbers are unknown.



Figure 1. (a) Neovulva with lesions on the left labium minus at day three after symptom onset, (b) neovulva at day 4, (c) neovulva at day 5, and (d) neovulva at day 14.

In summary, genital HSV-1 can occur in transgender women, although the exact prevalence is not known. The clinical presentation may be similar to that of the non-transgender population. Antivirals may effectively shorten the symptomatic period. Topical treatment with analgesic cream may give symptom relief.

Declaration of conflicting interests

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