CASE REPORT

A CASE OF LABIAL ADHESIONS FOLLOWING PRIMARY GENITAL HERPES INFECTION

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Abstract
Labial adhesions are usually associated with hypo-oestrogenism, but it is also a rare complication of genital herpes infection. We present a case report of a 23-year-old woman presenting with primary genital herpes infection, progressing to labial adhesions.

Keywords: Labial adhesions, primary genital herpes

Introduction
Genital herpes is one of the most common sexually transmitted diseases in Sri Lanka 1. In addition to the classical painful vesicular-papular lesions, other common clinical manifestations of genital herpes include vulval soreness, urethral and vaginal discharge and vulvovaginal fissures 2,3,4. Urinary retention associated with genital herpes infection is mainly due to pain and also occurs as a consequence of sacral radiculomylopathy 5. Although labial adhesions are more often associated with hypo-oestrogenism, it may occur as a rare but recognized local complication of genital herpes infection. Here we present a case of almost complete thick band labial adhesions two weeks following medical treatment for genital herpes.

Case Report
A 23-year-old nulliparous woman presented with vulval pain, dysuria and fever for two days. On abdominal examination, there was mild tenderness over the supra pubic area. On vulval examination, she had extensive, multiple, painful genital ulcers with some blistering lesions over both labia majora and minora. In addition, there was painful bilateral inguinal lymphadenopathy. She had been married for five years and had been in a monogamous relationship with her partner, with the last sexual exposure having been about 10 days prior to the development of ulcers. Neither she nor her partner had developed similar genital or oral ulcers before. A presumptive diagnosis of primary genital herpes was made based on the clinical manifestations, and HSV type 2 was detected in the vulval lesions via HSV DNA PCR (Herpes simplex virus DNA polymerase chain reaction). She was treated with a 7 day course of oral acyclovir 1 g per day. Oral cefuroxime and oral metronidazole were given for 5 days.

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to prevent secondary bacterial infections. She was screened negative for other sexually transmitted infections, including human immunodeficiency virus infection. Her partner was referred to the sexually transmitted disease laboratory for screening of human immunodeficiency virus infection and syphilis, in addition to HSV.

She was offered sitz baths three times daily in view of her extreme discomfort and oedema. She was reviewed in 4 days and she made a gradual but slow recovery. Even though she was compliant with her medications, she did not properly follow instructions given with regards to the sitz bathing procedure.

Ten days later, she presented with a complaint of narrowing of the vaginal introitus and dysuria. But she had a normal urine stream. On examination, the vulval lesions were in partial remission and there was a thick band of adhesion on the upper two third of the labia minora with multiple scars of healing ulcers on either side (Figure 1). Manual separation of adhesions was not attempted due to the tense nature of the adhesions. Surgical separation of labial adhesions was done under general anesthesia (Figure 2). Following that, she was advised to continue regular sitz baths to prevent re-adhesions. After two weeks the genital herpes ulcers had completely remitted and there were no further labial adhesions. A further follow up appointment was arranged in three months.

**Discussion**

Labial adhesions are not common among women in the reproductive age who have a well oestrogenised vulva, in comparison to prepubertal and postmenopausal women with a less oestrogenised vulva 6. Labial adhesions are a rare but severe form of local complication of genital herpes infection in young women 7. Although there are some case reports on adult labial adhesions in literature, there are only a few reports of adhesions following genital
herpes infection. Labial adhesions associated urinary retention may further complicate the condition and may lead to acute renal failure, if adhesions are not relieved quickly 4. But our patient did not develop urinary retention due to labial adhesions.

The formation of labial adhesions can be prevented by early treatment with adequate doses of oral acyclovir 8,9. This reduces the viral shedding and accelerates the healing of genital ulcers. Early healing prevents apposition and adherence of the labia minora and labia majora. In addition to the antiviral treatment, patients should be encouraged to carry out sitz baths to facilitate the removal of exudates over the ulcers, which is responsible for adhesion formation 10. Gentle application of local anaesthetic over the labia minora, also alleviates pain and prevents labial adhesion formation in patients with genital herpes 10. The usual solution for adult labial adhesion following genital herpes infection is surgical adhesiolysis and CO2 laser vaporization. Manual separation of the labia under application of local anaesthesia can be considered in patients who have less dense adhesions.

To the best of our knowledge, this is the first published report in Sri Lanka in this area. This report highlights the importance of health care providers being vigilant about this rare complication, as genital herpes infection is a very common sexually transmitted infection in Sri Lanka.

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