CASE REPORT

Labial Fusion Following Episiotomy in a Woman of Reproductive Age

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ABSTRACT

Background: The occurrence of labial fusion in an adult following episiotomy is rarely reported. Even though it is one of the simplest procedures performed in obstetric practice, an episiotomy may be complicated by labial fusion which results in difficulty in sexual intercourse and infertility.

Case Report: She was a 23-year old Primipara who presented to the Gynaecological Clinic of the Abubakar Tafawa Balewa University Teaching Hospital (ATBUTH) with complaints of lack of sexual satisfaction, dysmenorrhea and inability to conceive. Pelvic examination revealed normal clitoris and labiamajora with fused labia minora forming a blind end vaginal pouch. She had surgical separation and repair of the labia, and achieved spontaneous conception shortly after.

Conclusion: Poorly healed episiotomy can lead to labial fusion. The choice of surgical separation was due to the thick septum forming a pouch. Emphasis should be on perineal care for every postpartum client.

Keywords: *Adhesion, Delivery, Infertility, Septum, Vagina, Postpartum*

INTRODUCTION:

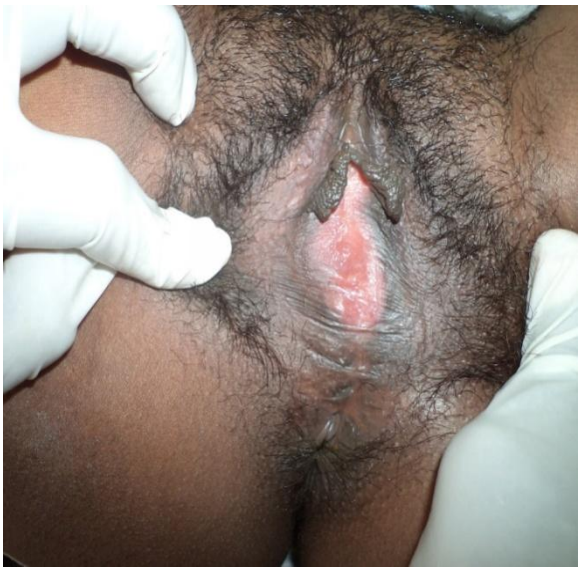
Labial fusion is one of the rare cases in adult female of reproductive age group; it is a common condition in pre pubertal girls and to some extent in postmenopausal women.[1,2]Labial fusion may be complete or partial depending on the extent of occlusion of the labia minora.[3] Even though the fusion in a pre-pubertal girl may not present with symptoms, the complete form of labial fusion may present with symptoms of urinary tract infection, occasionally urine retention and dyspareunia.[4] Labial fusion in adults of reproductive age occurs due to infections, irritation, hypo-oestrogenism, inflammation and genital trauma.[1,5] Episiotomy being one of the most common and simplest obstetric procedures is a rare cause of labial adhesion. It is no longer routinely given to all parturients and may be complicated by shortening of the vagina, stenosis, and labial agglutination may occur since the procedure has been observed to increase blood loss and perineal infections rates, the result of which is poor penetration, dyspareunia, and infertility.[6] Options of treatment for labial adhesion include the application of estrogen cream, separation, and excision (Fenton's Procedure) all of which are dependent on the age of the patient and the extent of fusion.

CASE REPORT

A 23-year old primipara whose last child-birth was 1year 8months before presentation was seen in the Gynaecology Clinic with a history of lack of sexual satisfaction, dysmenorrhoea and inability to conceive. She did not have trouble with bladder emptying and had no other urinary symptoms. Her last pregnancy was supervised at Urban Maternity in Bauchi, she delivered a live female neonate with a birth weight of 2.7kg and had a medio-lateral episiotomy that was complicated by sepsis. She had no history of sexual abuse or intermittent cyclical lower abdominal pain but had noticed a significant decrease in the quantity of her menstruation. Other than this, the patient did not suffer from any other medical condition and was in good health.

She appeared healthy on general examination. Inspection of the genitalia showed a longitudinal vaginal septum with an opening on the anterior fourchette close to the position of the urethra. The vagina and the cervix were not visualized (Figure 1). There was a septum that formed a pouch admitting about 3-4cm of the examining finger (Figure 2). Pelvic ultrasound showed normal uterus and adnexae.

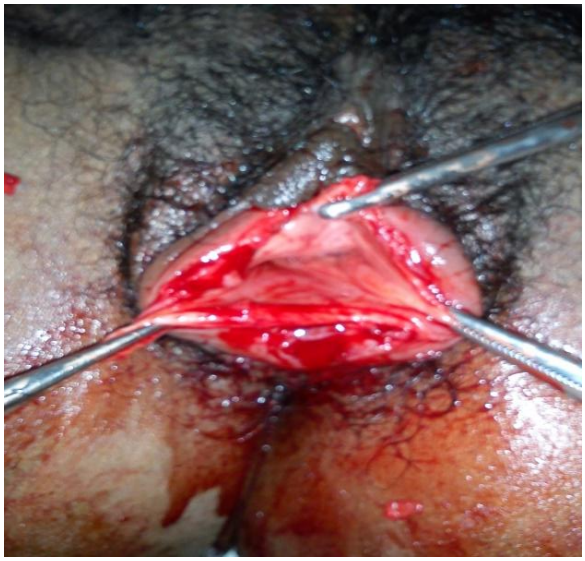
Figure 1. Showing labial adhesion with area of healed left medio-lateral episiotomy



No evidence of haematocolpos or haematometra was observed. Other hematological investigations were normal. She was counseled on her diagnosis. The patient consented to examination and repair under anesthesia. She had a sharp dissection of the pouch under local anesthesia (figure 3) and the edges of the incision repaired using vicryl®2/0, and separated using a piece of wrapped Vaseline® gauze.

Figure 2. Showing the index finger in the pouch formed by the labial septum

Figure 3. Following dissection of the septum, showing normal and clean vaginal mucosa



She did well subsequently and was discharged on the post-operative day 1. She was followed up monthly for 6months. An

ultrasound done at last visit revealed a pregnancy of 5weeks.

DISCUSSION

Labial adhesion occurs commonly in children before pubertywith a reported incidence of less than 5%.[1,15] The occurrence of this condition in sexually active women however, has not been widely established, rather, it is seen more among women in the menopausal age bracket.[4,10,13]Some of the risk factors proffered include genital infections, irritation and low oestrogen levels.

In women that had episiotomy following delivery, there has been a reported increase risk with healing, pain and late resumption of sexual activity when compared to women that had no episiotomy. It is postulated that in a patient with a poorly healed episiotomy, the raw surfaces and the inflammatory response of the labia may result in adhesion and scar formation thereby causing stiffness and sometimes stenosis in the vagina or labia with resultant labial adhesions.[5] This is commonly seen in women that had a bilateral episiotomy with no special instructions given on nutrition, perineal and hand hygiene since these factors are key to successful wound healing.[7,8,14]

Labial fusion can be partial or complete.[3] In some patients such as the index case, a tiny opening may be seen at the apex of the septum formed by the fusion which serves as a conduit for menstrual blood to flow.

Generally, management of labial fusion can either be pharmacological or surgical, the use of estrogen cream has been advocated especially in pre pubertal girls and peri-menopausal women.This may not be the preferred treatment option for women in the puerperium where a relative hyper-estrogenic state is thought to occur.[1] However, in the presence of a thick septum like in our case and in conditions of failed topical estrogen therapy, surgical management is usually the best treatment option.[1,9,10,13] This is particularly appropriate for our client who presented with sexual and fertility problems.The use of topical conjugated estrogen cream applied twice a day for some weeks pre and post surgery has been shown to be useful in enhancing the formation of new epithelial tissue around the region of application.[8,11] Similarly, creams containing testosterone and corticosteroids have equally been used for vulval fusion with great success.[12] However, due to their non-availability and cost, they were not utilized in the index case.

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