

Adolescent labial fusion: A case report

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Abstract

Background: Labial fusion is an acquired condition that occurs in young girls; it is uncommon beyond the age of 10 years and presentation in the older age group is unusual. Initial management is conservative but medical or surgical intervention may sometimes be indicated.

Case report: A 17-year old adolescent presented with complaints of absent vaginal opening since birth. She had no other symptom. She had normally developed secondary sexual characteristics and the clitoris was normal in size and structure but the vaginal introitus was hidden behind a fused labia minora. On ultrasound scan she had normal female internal genitalia. She had surgical division of the fused labia minora in theatre.

Summary and conclusion: Labial fusion in the older age group is an unusual presentation. Though the cause is unknown low oestrogen level is usually implicated. Management is mainly conservative or medical; the case we presented was treated surgically.

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I. Introduction

Labial fusion or labial agglutination or adhesion as it is called in, is an acquired condition that occurs in girls aged 3 months to 3 years¹. It is uncommon beyond the age of 10 years and presentation in the older age group is considered an unusual presentation². The exact cause is unknown but low oestrogen is highly implicated and for this reason the condition may sometimes occur in puerperal or postmenopausal women when serum oestrogen levels are also known to be low³. Initial management is conservative especially in patients who are asymptomatic but where treatment is indicated it is usual to try medical treatment first; options include the use of topical conjugated oestrogen cream or a steroid cream¹⁻³ with not much difference in treatment outcome between the two^{2,3}. Surgical treatment is resorted to where these initial approaches fail³.

II. Case report

The patient was a 17-year old adolescent who had just completed her secondary school education and was planning to get married. She presented to the clinic with complaints of absent vaginal opening since birth. According to her, she became concerned when she came to find out that her "private part" was not like that of her friends. She menstruates normally for four days in a regular 28-day cycle. There was no dysmenorrhoea or intermenstrual bleed, and no urinary symptoms. She had no history of sexual abuse, trauma to the genital tract, or any surgical procedure (traditional or otherwise). She had not been sexually abused before. She had no prior contact with any health care facility though she had sought traditional medication for the condition prior to presenting our facility. She is single and had just completed her secondary education. She is planning on getting married hence the presentation. She was the first child in a family of seven children; none of her other siblings had a similar presentation. Her mother denied any history of illness during her pregnancy.

When she was examined she was found to be in good health. Her height was 1.59 metres and she weighed 63 kg giving a BMI of 24.9kg/m². Her breasts were normally developed at Tanner stage IV. Chest examination was essentially normal. There were no abnormal findings on abdominal examination. Pelvic examination revealed a feminine pubic hair distribution, normal clitoris in size and structure, absent vaginal introitus, and fused labia minora across the midline. A gentle lateral traction on the labial skin did not leave any impression on the fused labia. At the upper most part of the fused labia, just below the clitoris, there was a pinhole opening. A uterine sound was introduced gently into this opening and it was advanced in a posterior-inferior fashion without any hindrance until the tip of the instrument touched a firm structure at the depth of about 6cm; this was presumably the vaginal fourchette. A bimanual pelvic examination could obviously not be done.

Investigation revealed the presence of normal sized uterus by ultrasound scan; there were no abnormal pelvic findings. Packed cell volume was 32% and electrolytes, urea, and creatinine levels were all within normal range.

The fusion was divided in theatre. Intraoperative findings were as earlier presented. Via a clean cut on the labial skin along the midline starting from just below the clitoris to a depth of about 6cm (as earlier assessed by the uterine sound), the fused tissue was divided. Additional findings following this surgical separation was that of a healthy looking pink vulvar skin and a normal urethral meatus just below the clitoris; catheterization was done with ease. Interrupted stitches were placed on the wound edges to bring the inner vulvar mucosal skin and the outer labial skin together up till the level of the vaginal introitus. At this level the inner vaginal skin was approximated to the perineal skin. Suturing was done using vicryl size 4/0. Haemostasis was thus achieved. A gentle digital examination was then done to assess the vaginal capacity and the internal pelvic structures; no abnormalities were found. The vaginal length was about 7cm and the cervix felt normal. The procedure was thus concluded and a sterile dressing was placed over the wound. Estimated blood loss was about 50mls. She was not transfused.

Post operatively she was placed on analgesics and antibiotics, and was counselled on the need for daily sitz bath. Oestrogen cream was also prescribed for her to be used for two weeks. Urethral catheter was removed on the 2nd post operative day. She had an uneventful post operative recovery and was discharged home after five days with a two-week appointment for the gynaecological clinic. She reported as planned; she had no complaint. The vulval wound had healed nicely; the vaginal introitus was normal and the vagina was capacious.

III. Summary and Conclusion

Labial fusion in the older age group like the case presented, is considered an unusual presentation. Low oestrogen level is highly implicated, and for this reason occurrence in the pubertal girls when oestrogen production has already commenced is uncommon. We did not find any apparent risk factor for its occurrence in the case presented but the late presentation suggests it must have been asymptomatic as is the usual presentation. Though the commonest treatment modality is to conserve or at best use topical applications, the fusion was thick in the case presented and surgical intervention had to be instituted.

In conclusion, fusion of the labia minora is a common benign condition in the prepubertal female. It occurs mainly between 3 months and 3 years of age. In rare occasions it may persist into adolescence. Surgical treatment is uncommon but on rare occasion it may be resorted to.

References

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