

Labial fusion in the postpartum period: A rare case

This case report describes an extremely rare case of labial fusion in the postpartum period discovered within a District General Hospital within Bart's NHS Trust, East London.

Dr Chen Liu¹, Ms Shikha Kapur²
1. Barts Health NHS Trust, London, UK
2. Bart's Health NHS Trust, Department of Obstetrics and Gynaecology, London, UK



Objective

Labial fusion (LF) is a rare condition where the labia minora adheres in the midline. Most commonly, it is associated with hypoestrogenation, inflammation or recurrent urinary infections.^{1,2} Although more common in pre-pubertal girls (affecting up to 0.6-5%) and post-menopausal women, cases of LF are rare in the literature, especially within women of reproductive age and the postpartum period.³

Case

We present a case of labial fusion incidentally diagnosed during the post-partum period. A 26-year-old primiparous woman was admitted to labour ward in a district general hospital for forceps delivery due to prolonged second stage. She received an episiotomy and a second-degree tear during delivery.

She became pyrexia postnatally and received appropriate antibiotics following the trust guidelines. After stabilisation and discharge, it was planned for routine community perineal checks with the midwifery team. Assessment at this stage (day 2 post-delivery) reported the perineum healing well, with no concerns.

Day 16 postnatal:

The patient presented to maternity triage with a mild perineal wound infection. On examination, yellow discharge from the wound site was noted, healing was progressing well with the base visualised. Antibiotics were given, a wound swab taken, and the patient was discharged. Pathology identified E.coli growth from the wound swab.

Day 18 postnatal:

The patient re-presented passing per-vaginal clots, with pain around wound site. On attempting vaginal examination, we identified the fused labia. On both postnatal presentations, no urinary symptoms were reported.

In Theatres:

The labia were separated with manual pressure. Raw areas were noticed in between the adhesion sites. A single stitch was inserted on each side to avoid re-adhesion and oestradiol cream was applied. No recurrence has occurred since discharge.

Discussion

Labial fusion is extremely rare in women of reproductive ages, especially with no history of chronic skin inflammation (such as lichen sclerosis), or no evidence of low oestrogen levels.¹ In this case, she had no history of excessive skin healing conditions such as keloid scarring, and no history of female genital manipulation. The most likely cause in this case was due to trauma and grazing to the labia from forceps instrumental delivery, as well as acute wound infection.

Typical treatment of LF involves oestrogen cream, or surgical intervention.² In pre-pubertal populations, manual separation with topical antibiotic follow up is the most cost-effective management, yielding immediate results and low recurrence.⁴ Existing literature guiding treatment of LF seems largely based on post-menopausal and paediatric populations. There is little research directly exploring LF in post-partum, reproductive ages. As a condition that can lead to irreversible changes to the vulva, it is crucial such cases are reported and utilised as educational tools.

Cases of LF within post-menopausal women tend to present with associated urinary symptoms.² Our case, like LF in paediatric populations, was incidental and largely asymptomatic.² Work towards careful examination and awareness of LF in the reproductive post-partum population is required.

Conclusion

LF should be considered within the differentials of postpartum, reproductive age patients present with wound issues, urinary symptoms or even asymptotically. We encourage educating healthcare teams regarding LF to improve diagnostic accuracy and early intervention.

References

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