# Coalescence Of The Labia Minora In An Adult Woman Causing Chronic Bladder Retention: A Case Report

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#### Abstract

Coalescence of the labia minora is defined as partial or complete adhesion of the labia minora. Complete labial fusion is a rare condition in adults. Coalescence of the labia minora generally occurs in early childhood and in prepubertal girls. It is a rare entity in women of childbearing age, except in cases of hypo oestrogenism. In general, micturition dysfunction is a rare complication of labia minora coalescence. We report the case of an 18-year-old female with complete and severe labia minora coalescence complicated by bladder retention.

**Keywords:** Coalescence of labia minora, Urine retention, Cystostomy, Surgery, A case report.

Date of Submission: 25-12-2023 Date of Acceptance: 05-01-2024

## I. Introduction

Labial adhesion (also known as labial agglutination and labial coalescence) is a partial but sometimes complete adhesion of the labia minora [1]. It is most common in infants and prepubertal girls, but is rarely reported in postmenopausal women, especially those of childbearing age [2].

Coalescence of the labia minora may be due to repeated infections and chronic inflammatory conditions [3]. It may be complicated by urinary dysfunction such as urine leakage or bladder retention [4].

#### II. Patient and observation

#### **Patient information:**

We report the case of an 18 year old virgin referred to our facility for the management of chronic bladder retention which required a suprapubic cystostomy due to the impossibility of visualising the ureteral meatus and catheterising it. On examination, the patient was previously well adjusted, and the presence of secondary sexual characteristics was noted. Examination of the perineal region revealed a complete union of the labia minora with no visualization of the clitoris and the ureteral meatus, this complete fusion covering the entire vagina.

# **Therapeutic intervention:**

The patient was operated on under locoregional anaesthetic, we began by freeing the audience between the labia minora and then carefully dissecting it to find the clitoris and the vaginal outlet, as soon as the hymen was discovered a cloudy liquid was released due to the retention of blood from menstruation and urine, we did not find the ureteral meatus and so we proceeded with a vaginoscopy which found a poorly positioned intra vaginal meatus.

DOI: 10.9790/0853-2301012022 www.iosrjournals.org 20 | Page

To avoid restenosis and expose the meatus, we tied the labia minora to the labia majora with absorbable suture, as well as the ureteral meatus. The cystostomy was removed and a Foley catheter was left in place for a few days.

#### Follow-up and results:

The Foley catheter was removed after 15 days and the patient returned to normal micturition; the three-month check-up found no restenosis.

#### III. Discussion

Labial agglutination occurs when the labia minora have fused at the midline through filiform or dense adhesions, forming a raphe. This condition is typically seen in prepubertal girls.

This symphysis may be loose or dense. It is most commonly seen in pre-pubertal girls, but has also been reported in post-menopausal women and rarely in genitally active women [5]-[6].

From an aetiological point of view, this condition can be explained by hypo-oestrogenism, lichen sclerosus and also by local inflammation due to irritation caused by poor hygiene, contact with urine, local infection and mechanical irritants, but sometimes, as in the case of our patient, no detectable aetiological factor is found [7].

In contrast to the little girl, symptoms are present in older women: dyspareunia, urinary tract infections, incontinence or obstruction of urine output [8].

The management of this condition can be by local oestrogens and manual separation of adhesions are accepted as initial treatment in sparse cases, surgical strategy may be necessary in cases of thick fibrous adhesions [9] as in our patient.

## IV. Conclusion

Although very rare, coalescence of the labia minora can be seen in women during periods of genital activity, and unlike in infants and prepubertal girls, it can be symptomatic with urinary or gynaecological signs.

The diagnosis is made on clinical examination, which may be supplemented by ultrasound and imaging to look for aetiology, particularly tumour. Treatment is based on local techniques and separation, whether manual or surgical, and the search for the cause is important to prevent recurrence.

#### **Figures**

Figure 1 : Suprapubic cystoscopy

Figure 2: Ultrasound appearance

Figure 3: Incision and separation of the labia minora

Figure 4: Hymen release

**Figure 5 :** Vaginoscopy and meatus ureteris **Figure 6 :** Result after labia minora fixation



Figure 1 : Suprapubic cystoscopy



Figure 4 : Hymen release



Figure 2 :Completely closed vaginal cleft



Figure 5: Vaginoscopy and meatus ureteris



Figure 3: Incision and separation of



Figure 6 : Result after labia minora fixation

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