

COMPLETE LABIAL FUSION CAUSING LUTS IN A POSTMENOPAUSAL WOMAN: CASE REPORT

Dr Asmita Solanki

3rd year Resident Doctor, Department of Urology, RNT Medical College, Udaipur, Rajasthan, India.

Dr Varun Laddha

Assistant Professor, Department of Urology, RNT medical college, Udaipur.

Dr Sunil Gokhroo

Professor and HOD, Department of Urology, RNT medical college, Udaipur.

ABSTRACT

Vulvar adhesions are defined as partial or complete adherence of the labia minora and/or labia majora, are rare in postmenopausal Women and can lead to advanced-stage diagnosis, particularly in sexually inactive women. It may be a rare cause of voiding dysfunction or urinary retention. We present a case of a 65 year old postmenopausal woman presenting with LUTS due to complete labial fusion. The patient experienced symptoms including hesitancy, poor stream, and post void dribbling for one year. Physical examination revealed complete fusion of the labia minora, which obstructed urine flow and created "balloon-like" effect. The patient was treated both with topical estrogen and surgical separation of labial fusion. Due to resistance to topical estrogen treatment, the patient underwent surgical separation. Post operative follow-up at 2 months showed complete resolution of symptoms and no recurrence.

KEYWORDS : Labial adhesion, labial agglutination, LUTS, urinary retention

INTRODUCTION:

Vulvar adhesion occur in 0.6% to 1.4% of children and are rarer in postmenopausal women, whose incidence is not available.¹ Vulvar adhesions may be asymptomatic, and some patients seek medical attention due to urinary tract symptoms or vulvar discomfort. Urinary tract symptoms include dysuria, urgency, urinary retention, and recurrent urinary tract infections. Symptoms of vulvar discomfort include genital itching, vulvar pain, and dyspareunia.

The exact cause is unknown; but low estrogen levels associated with menopause, chronic vulval inflammation, and sexual inactivity have been suggested in the pathogenesis².

Patients with complete labial fusion may present with voiding difficulty, incomplete emptying, urinary retention, urinary frequency, urinary incontinence, and vulvar irritation³. However, these symptoms are not specific to labial fusion and may lead to misdiagnosis. Lu et al. described a case of postmenopausal labial agglutination resistant to topical estrogen treatment and mimicking urinary incontinence with vulvar leukoplakia and vaginal low grade squamous intraepithelial neoplasia³.

Here we report a case of complete labial fusion causing voiding dysfunction, urinary retention and post-void dribbling in a postmenopausal woman, with no underlying gynecologic anomaly, that is treated surgically.

Case Report:

A 65-year-old postmenopausal woman presented with a one year history of voiding symptoms such as hesitancy, poor stream, intermittent flow, straining during micturition, postvoiding dribbling and swelling at genital region. She had no previous history of urinary incontinence or pelvic organ prolapse. She had been postmenopausal for 22 years and was sexually inactive for 30 years. History of hysterectomy 20 years ago. Patient also had infertility.

Genital examination revealed complete fusion of the labia minora [figure 1a]. The fusion was dense and fibrotic, allowing urine to pass only through a tiny aperture after first collecting in a "balloon-like manner behind the fused tissue. Urinalysis, renal function tests, and renal ultrasonography were normal. Labial fusion was resistant to topical estrogen treatment therefore surgery was planned.

Patient underwent surgery under anesthesia, the labia were

separated using blunt dissection and cautery; the urethral meatus and vagina were found to be otherwise normal. [Figure 1b]. The patient was catheterized for 3 days post-operatively and then was discharged without complications.

At the two month follow-up, the patient remained asymptomatic with no signs of recurrence.

Preoperative And Intra-operative Images



Figure(1a): Preoperative Image



Figure (1b): Intraoperative image

DISCUSSION:

Vulvar adhesions, also known as labial adhesions, refer to partial or complete adhesions of the labia minora or majora, mostly located near the clitoris. Vulvar adhesions are a rare disease in postmenopausal women, and their incidence in

postmenopausal women has not been reported in significant numbers^{1,2}.

Patients may also present with urinary symptoms such as dysuria, frequency, urgency, urinary incontinence straining to void, slow urinary stream, incomplete emptying, recurrent urinary tract infections, urinary retention and dyspareunia if sexually active⁴.

Pseudo-incontinence' is a notable symptom where urine collects in a vagina and leaks slowly through the adhesion⁵. Incomplete emptying and urinary retention may lead to recurrent urinary tract infections and upper urinary tract diseases.

Treatment is usually topical estrogen application and separation under general anesthesia when needed⁴.

Kaplan et al. reported two postmenopausal women treated with nonsurgical separation of complete labial fusion using Hegar dilator under general anesthesia². Dirim and Hasirci reported the release of labial adhesions by sharp dissection and approximation of the defects using polydioxanone sutures under general anesthesia⁶.

To prevent recurrences, Johnson et al. suggested performing full thickness flap grafting⁷. In our case, we showed that separation of the labia is possible with the combination of blunt dissection and cautery with need for sutures, and no complications were observed during the 2 months follow-up. In conclusion, postmenopausal labial fusion is a rare cause of voiding dysfunction or urinary retention, which is diagnosed in advanced stages especially in sexually inactive women. Topical estrogen treatment may not resolve adhesions and surgery may be necessary to cure the symptoms.



Figure 2: post-operative Image at 2 month follow-up

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