

# Complete labial fusion and urinary retention in a postmenopausal woman

## Fusão labial completa e retenção urinária em mulher na pós-menopausa

Patrícia Gomes Ferreira<sup>1</sup>, Vânia Ferreira<sup>1</sup>, Foo Kok Mak<sup>1</sup>

Serviço de Ginecologia/Obstetrícia do Centro Hospitalar de Entre o Douro e Vouga

### Abstract

Complete labial fusion is a rare cause of urinary retention and typically presents at the extremes of age. Oestrogen deficiency, chronic inflammation, local trauma and lack of sexual activity may predispose to the appearance of labial fusion. The authors present a recurrence case of a postmenopausal woman with urinary retention associated with labial fusion.

**Keywords:** Labial fusion; Urinary retention; Menopause.

### Resumo

A fusão labial completa é uma causa rara de retenção urinária e com apresentação típica nos extremos da idade. A deficiência de estrogénios, a inflamação crónica, o trauma local e a ausência de atividade sexual podem predispor para o surgimento da fusão labial. Os autores apresentam a recorrência de um caso de uma mulher na pós-menopausa com retenção urinária associada à fusão labial.

**Palavras-chave:** Fusão labial; retenção urinária; menopausa.

### DESCRIPTION

Labial fusion, which is also called labial adhesion or vulvar fusion, is defined as when the labia minora or majora undergoes partial or complete adherence<sup>1</sup>. Labial adhesion is a rare cause of female voiding difficulty and it is more commonly seen in the extremes of age<sup>2</sup>. The aetiology is thought to be chronic inflammation, oestrogen deficiency, local trauma and lack of sexual activity<sup>3,4</sup>.

A 63-year-old woman presented to the emergency department with abdominal pain and urinary retention

for over 24 hours. In the previous 3 months, she complained with incomplete voiding and in the previous days, she had dribbling of urine.

Six years ago, the patient had undergone surgical correction for labial fusion. She was nulliparous, had been sexually inactive for 20 years, and reported menopause 15 years ago. Physical examination revealed a fused *labia minora* at the midline, obscuring the vestibule, vagina, and urethral meatus (Figure 1). No vulvar lesions suspicious of malignancy or lichen sclerosis were observed.

Under local anaesthesia, the fused *labia* were separated by blunt dissection along the line of fusion, with spontaneous discharge of urine (Figure 2). The patient was catheterized for 24 hours post-operatively. On discharge, the patient was advised to apply vaginal

1. Serviço de Ginecologia/Obstetrícia do Centro Hospitalar de Entre o Douro e Vouga.



**FIGURE 1.** Complete labial fusion.



**FIGURE 2.** After surgical procedure.

oestrogen cream and dilate the vagina digitally and regularly after the procedure. Recurrence can occur in 20% of patients who undergo surgical or manual separation<sup>5</sup>.

After 24 months of follow-up, the patient had no complaints during micturition and no recurrent labial fusion was observed.

#### REFERENCES

1. Üstüner I, Avşar AF. Labial adhesion with acute urinary retention secondary to Bartholin's Abscess. *Low Urin Tract Symptoms* 2012;4:106-8.
2. Norbeck JC, Ritchey MR, Bloom DA. Labial fusion causing upper urinary tract obstruction. *Urology* 1993;42:209-11.
3. Juma S. Urinary retention in women. *Curr Opin Urol* 2014;24:375-9.
4. Laih CY, Huang CP, Chou EC. Labial adhesion in a postmenopausal female: A case report. *Medicine (Baltimore)*. 2020 Jun 26;99(26):e20803. doi: 10.1097/MD.0000000000020803. PMID: 32590764; PMCID: PMC7329012.
5. Singh P, Han HC. Labial adhesions in postmenopausal wo-

men: presentation and management. *Int Urogynecol J* 2019;30:1429-32. doi: 10.1007/s00192-018-3821-1.

#### AUTHOR'S CONTRIBUTION

Conceptualization: Patrícia Gomes Ferreira, Vânia Ferreira and Foo Kok Mak. Methodology: Patrícia Ferreira. Writing – Original draft: Patrícia Ferreira. Writing – Review: Vânia Ferreira and Foo Kok Mak.

#### CONFLICTS OF INTEREST

There are no conflicts of interest.

#### PATIENT CONSENT

The patient gave permission to use clinical information and photographic material in this publication.

#### CORRESPONDENCE TO

Patrícia Gomes Ferreira  
E-mail: patriciagomesferreira.10@gmail.com  
<https://orcid.org/0000-0001-5054-4936>

**RECEIVED:** 21/05/2023

**ACCEPTED:** 26/10/2023