Complete labial fusion with urinary incontinence in a postmenopausal woman: A case report

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ABSTRACT

An 83-year-old woman presented to a rural general hospital with urinary incontinence. She was diagnosed with complete labial fusion caused by genitourinary syndrome of menopause. She was successfully treated with surgical separation followed by hydrocolloid dressings. Genitourinary syndrome of menopause often remains undiagnosed due to patient embarrassment. Greater recognition of this condition in primary care can improve patient access to appropriate treatment and improve quality of life.

1. Introduction

Genitourinary syndrome of menopause (GSM) is a condition that occurs due to falling estrogen levels after the menopause, encompassing vulvar and vaginal dryness, burning, and pain, as well as urinary disorders such as urinary urgency, urinary incontinence, and recurrent cystitis [1,2]. Labial fusion can result from GSM [1–5]. In the most severe cases, the labia are completely fused on both sides (complete labial fusion: CLF), and the vaginal vestibule is completely covered, eventually resulting in pseudo-urinary incontinence. This is a case report of complete labial fusion in a woman in her ninth decade with pseudo-urinary incontinence who was treated with surgical separation followed by hydrocolloid dressings.

2. Case Presentation

An 83-year-old postmenopausal woman presented to a rural general hospital with a complaint of urinary incontinence. She had been sexually inactive for several years. She had experienced two vaginal deliveries. Her medical history did not include prior vulvar disease, surgery or radiation therapy. Seven years previously she had been successfully treated with a topical synthetic corticosteroid cream, for vulvar pruritus and burning, with vulvar erosions. Out of embarrassment, she waited four years to seek medical help after she first became aware of labial fusion and urinary incontinence. She presented when her urinary flow had substantially reduced. Physical examination revealed complete labial fusion covering the external urethral meatus, with a pinhole opening (Fig. 1-A). There were no white crinkled or thickened patches of skin suggestive of lichen sclerosus. A hydrocolpos was seen on transabdominal ultrasonography (Fig. 1-B).

2.1. Surgical Intervention

The labia were separated under lumbar anesthesia. An upward incision was made through the small pinhole, and the adherent labia were bluntly dissected to reveal the external urethral and vaginal openings. Both labia minora were excised and sutured with 3-0 absorbable thread (Fig. 1-C). A 22-Fr urethral catheter was inserted to confirm urine outflow before the operation was completed. To prevent adhesions, the vulva was covered with hydrocolloid dressings (Fig. 1-D).

2.2. Postoperative Course

The urinary catheter was removed the next day, and the symptoms of urinary incontinence disappeared. Transabdominal ultrasonography after urination showed no residual urine. New hydrocolloid dressings were reapplied one, two, and four weeks after surgery. No adhesion formation or urinary incontinence was noted during the follow-up period of one year and ten months. Histopathological examination showed inflammatory cells but no malignancy or evidence of lichen sclerosus.

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3. Discussion

The term GSM was coined in 2014 [6] to reduce the stigma associated with genital symptoms after the menopause and facilitate open conversations between women and their healthcare providers [1,6]. It is defined as a collection of symptoms and signs associated with a decrease in estrogen and other sex steroids involving changes to the labia majora/minora, clitoris, vestibule/introitus, vagina, urethra and bladder. [1,2]. Approximately 40%-54% of postmenopausal women experience GSM [5]. However, the condition is often undiagnosed and untreated due to embarrassment or its association with natural aging [1]. Only 25%-54% of women with GSM consult practitioners [1,7,8], and only 4% can attribute vulvovaginal symptoms to GSM [1,9].

Greater awareness of this condition in primary care can reduce patient anxieties over consultation and facilitate earlier treatment. In this case, the medical history was typical of GSM, and vulvar changes progressed to complete labial fusion over seven years. The woman’s personal feelings and the social stigma of visiting a gynecology clinic discouraged her from accessing medical care, which delayed diagnosis and treatment.

Labial fusion after the menopause can be caused mainly by GSM and lichen sclerosus. In this case, there were no findings suggestive of lichen sclerosus, such as white crinkled or thickened patches of skin. We concluded it was caused by GSM. Labial fusion can be classified as partial or complete. Partial labial fusion may improve with estrogen therapy (ET) alone, whereas complete labial fusion requires surgical treatment, as in this case.

Low-dose topical estrogens are commonly used to treat GSM and improve symptoms in up to 90% of women [4,10]. However, self-administration is sometimes difficult in elderly women. This is why hydrocolloid dressings were used in this case. [11]. Hydrocolloid dressing is known to be useful in acute injury treatment [11] and can be a more convenient alternative to topical estrogens.

The number of patients with GSM is expected to increase in Japan, as its population is aging [1]. Since gynecologists are concentrated in urban areas, primary care physicians in remote areas should be aware of GSM and instigate timely treatment and referral to specialist care if necessary.

Contributors

Rakan Kotoku was involved in patient care, participated in conception of the case report and drafted the manuscript. Yuji Orita was involved in patient care, literature review and revised the article critically for important intellectual content. Both authors approved the final submitted manuscript.

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Patient consent

The patient signed an informed consent form for the anonymous publication of this case report and accompanying images.

Provenance and peer review

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Conflict of interest statement

The authors declare that they have no conflict of interest regarding the publication of this case report.
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