Case Report

Bladder outlet obstruction due to labial agglutination

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Abstract

Here, we report the case of a 63-year-old female patient who presented with emptying symptoms and was subsequently diagnosed with delayed labial agglutination. The adhered labia minora were divided by blunt dissection, and a topical estrogen ointment was applied after surgery. The patient's voiding symptoms were completely resolved and no recurrence of labial agglutination was noted 3 months after surgery. Labial agglutination is rare but often manifests with nonspecific emptying symptoms. Nevertheless, it can be easily diagnosed on physical examination and successfully treated by surgical intervention and the application of a local estrogen ointment. We present this rare case in order to emphasize the importance of physical examination.

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1. Introduction

Labial agglutination is defined as the partial or complete adherence of the labia minora or majora. It is not rare in children but is uncommon in the elderly.1 Labial agglutination may be asymptomatic, but it can also cause urinary incontinence or dysuria. It may be caused by chronic inflammation or irritation of the vulvar skin due to poor hygiene, seborrheic dermatitis, or topical eczema.2 In addition, estrogen deficiency may lead to impairment of the labia epithelium, resulting in the progressive fusion of the labia. Local trauma, lichen sclerosis, and recurrent urinary tract infections can also contribute to labial agglutination.3 Even though labial agglutination is rare and often manifests with nonspecific emptying symptoms, it can be easily diagnosed on physical examination and successfully treated by surgical intervention and the application of local estrogen. Here, we present the case of a woman who suffered from nonspecific emptying symptoms and was diagnosed with delayed labial agglutination following a physical examination.

2. Case report

A 63-year-old postmenopausal woman experienced a very small urinary stream, severe voiding hesitancy, and postmicturitional dribbling for 1 month. The patient visited a local clinic and a urinary tract infection was initially diagnosed. No physical examination of the external genitalia was performed during this visit. An antibiotic was prescribed, but no significant improvement resulted from this treatment. She visited our outpatient department, where upon physical examination atrophic vulva with labial fusion was noted.

The patient was admitted for surgical intervention under spinal anesthesia. During the operation, complete fusion of the labia minor with obliteration of the vaginal introitus and urethral meatus was noted (Fig. 1). The adhered labia minor were divided by blunt dissection (Fig. 2). A large amount of retained urine was noted in the vagina. The urethral meatus was normal. The skin around the edge of the labia minor was repaired using 3-0 and 4-0 Vicryl sutures (Fig. 3).
The voiding symptoms were completely resolved after the procedure. A topical estrogen ointment was applied twice daily after the surgery. No recurrence of labial fusion was noted 3 months after the surgery (Fig. 4).

3. Discussion

The incidence of labial fusion in the general population is unknown, but it has been reported to occur in 0.6–5% of children.4,5 Most children with labial fusion are asymptomatic. Several authors have reported various manifestations of symptomatic labial fusion in adults and the elderly, including vulvar pruritus, urinary incontinence, voiding difficulties, urinary retention, and dysuria.2,3,6 Muppala and Meskhi described a 74-year-old woman with labial fusion who complained of a “popping sensation” in the vulva when sneezing or coughing.3 Julia et al reported the case of a 72-year-old woman with labial fusion who also presented with a paraclitoral seborrheic cyst.7 Both of these cases were menopausal women who presented with voiding difficulties and were initially diagnosed with urinary tract infections. The clinical courses of these cases were similar to the patient described here.

Topical estrogen should be the first choice of treatment, but surgical intervention can be used if other medical treatments
fail. Blunt labial dissection can be performed under spinal or general anesthesia. In this case, the edges of skin were approximated using 3-0 Vicryl sutures in an interrupted way. In order to avoid recurrence, additional procedures, such as the application of silicon film or hydrocolloid dressings or rotational skin flap grafting from the thigh may be undertaken, especially in refractory cases.

The perioperative application of topical estrogen has been recommended for treating atrophic labial skin. Muppala and Meskhi suggested the pre- and postoperative application of topical estrogen for 6 weeks. The combination of postoperative topical antibiotics and estrogens has also been used to decrease the rate of infection and improve the healing process.

In conclusion, the manifestation of emptying symptoms in postmenopausal women should raise the suspicion of labial fusion. Physical examination of the external genitalia is very important. In mild cases, conservative treatment with topical estrogen is usually sufficient, while surgical intervention is recommended for refractory or severe cases.

References