

Characteristics And Outcomes Of 16 Patients With Symptomatic Labial Adhesion

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Abstract

Objective: Describe the characteristics and outcomes of patients with primary labial adhesion requiring treatment for urinary obstructive symptoms.

Study Design: Retrospective review of all patients with a symptomatic primary labial adhesion referred to a vulvar specialty clinic over an 8-year period.

Results: Sixteen of 3983 new patients were diagnosed with a symptomatic labial adhesion; ages 9 months to 34 years. Fifteen cases involved prepubertal girls who were initially managed with conservative medical treatment including attention to vulvar hygiene and application of estrogen cream, of which four required eventual surgical lysis. One case occurred in a 34 year-old woman, which required surgical release. No recurrences have been recorded. Thirteen (of 14) patients endorsed vulvar symptoms prior to treatment of which, 8 noted resolution and 5 noted improvement following labial separation.

Conclusions: While treatment is typically employed for urinary obstructive symptoms, we found vulvar symptoms were not uncommon and improved following separation.

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INTRODUCTION

Labial adhesion is a vulvar condition defined as the partial to complete fusion of the labia minora or labia majora. Diagnosis is made upon visual inspection, and those typically affected are children less than six years old. However, labial adhesions have been reported in women who are postpartum, postmenopausal, and those with coexisting vulvar lesions (1). Labial adhesion should be distinguished from congenital deformities, as visually there is a midline raphe (line of fusion) present with labial adhesion that would not be apparent in a congenital condition.

Labial adhesions are thought to arise as a result of local irritation (often due to poor hygiene) in a setting of hypoestrogenism. While labial adhesion is not uncommon in

young girls, most cases are asymptomatic and spontaneously resolve as the girl enters puberty. Treatment is recommended only if the adhesion is symptomatic; resulting in urinary obstructive symptoms, as demonstrated by urinary difficulty, dysuria, or recurrent urinary tract infection (UTI).

We undertook this study to describe the characteristics and outcomes of patients diagnosed with symptomatic labial adhesion encountered in a vulvar specialty clinic over an 8-year period.

MATERIALS AND METHODS

Participants for this non-randomized retrospective chart review included 16 of 3983 new patients seen in a vulvar specialty clinic during the 8-year period from January 1995 through December 2002, for treatment of symptomatic primary labial adhesion, as demonstrated by urinary obstructive symptoms. Patients with labial adhesion in the setting of vulvar lichen sclerosus were not included in this review. A single practitioner (RPG) evaluated each patient, with follow-up abstracted to the last vulvar clinic visit prior to data abstraction March 1, 2005. Multiple sources were

utilized to identify the patients with a diagnosis of labial adhesion including: ICD 9 codes, personal documents, and an ongoing chart review. The University of Iowa Institutional Review Board approved the study.

The extracted data included: patient demographics, relevant history, coinciding conditions, and the treatment regimen employed. Additionally, vulvar symptoms prior to and following separation of the labial adhesion were available for 14 (of 16) patients. Diagnosis of symptomatic labial adhesion was made by the presence of an adhesion involving the labia and urinary obstructive symptoms such as, urinary difficulty, dysuria, or recurrent UTI.

All patients (and care-givers) were counseled on the importance of vulvar hygiene including: avoidance of contact irritants and use of bland topical emollient for skin protection, and to resist self-treatment with over-the-counter remedies for perceived infections, by both a registered nurse as well as the attending physician. These measures are routinely employed to eliminate contact irritation and reduce coexisting inflammation. Surgical separation was offered only if clinically indicated for inability to complete micturition secondary to labial obstruction.

RESULTS

The median age of patients with a diagnosis of primary labial adhesion was 4 years, range 9 months to 34 years. All the patients were Caucasian.

Eight patients were found to have co-existing contact dermatitis of the vulva in addition to labial adhesion. There was no evidence to suggest genital abuse, injury, or other regional trauma for any of the patients. Five patients (ages 2 to 7 years) were unsuccessfully treated with estrogen cream for the labial adhesion prior to evaluation at our clinic; of these, 4 responded to re-application topical estrogen cream in addition to vulvar skin care guidelines, while 1 required surgical separation.

The treatment regimen for the 15 children with symptomatic labial adhesion, including those with a history of unsuccessful topical estrogen cream application, was consistent. At the first visit they were prescribed estrogen cream to be applied nightly for one week and then three times per week until the next visit, typically in four to six weeks. Additionally, we have found that attention to vulvar skin care and avoidance of contact irritants is necessary for the long-term resolution of labial adhesion.

Five patients experienced resolution by the second visit. Four additional patients noted improvement and achieved resolution with continued treatment. Six patients did not respond to the estrogen and required surgical release. This was performed under general anesthesia utilizing sharp incision. Post-operatively patients were prescribed estrogen cream once per week and application of a bland emollient several times daily (in addition to skin care guidelines) to maintain separation.

Interestingly, two of the younger patients were identical twins presenting with labial adhesions at the same time; both of whom failed topical cream treatment prior to referral. They were started on the standard treatment regimen and presumably given identical treatment at home. However, one experienced resolution by the first follow-up appointment and the other required surgical separation.

The remaining patient with symptomatic labial adhesion was 34 years of age and underwent surgical separation of a fibrous adhesion, which precluded vaginal penetration. With the exception of concurrent contact dermatitis, her medical history was unremarkable.

The presence of vulvar symptoms is typically addressed at each clinic visit and was recorded for 14 patients with symptomatic labial adhesion, of which 13 endorsed symptoms, and 1 denied vulvar symptoms. Three experienced some degree of burning, 6 experienced itching, 5 experienced pain, 1 experienced dyspareunia, and 1 noted unusual vaginal discharge. Eight patients noted complete resolution and the remaining 5 patients noted improvement of vulvar symptoms following separation of the adhesion.

COMMENT

We report the patient characteristics and outcomes following treatment by a single practitioner for 16 cases of symptomatic primary labial adhesion. While, the treatments we utilize are similar to those previously reported (^{2, 3, 4}), we emphasize the importance of vulvar hygiene, including the use of sitz baths and a bland emollient, to protect and maintain the labial separation. Among the pediatric cases of labial adhesion we noted successful separation for 60% with medical management, many of whom had been treated with topical estrogen cream prior to referral to our center.

As aforementioned, unless the adhesion is symptomatic, we do not recommend treatment beyond attention to vulvar hygiene. For all cases, skin care guidelines are recommended and stressed to reduce further vulvar irritation and

coaptation. Typically the initial treatment method employed is application of topical estrogen cream, once or twice daily for up to a month, followed by application of an emollient such as petroleum or A&D ointment to maintain the separation. If spontaneous separation is not achieved, or if the patient develops urinary retention or symptoms of estrogen excess, surgical release of the adhesion may be indicated. While manual separation in the office has been reported (2), we do not endorse this technique, as it is unnecessarily traumatic. Rather, surgical release using anesthetic is advocated. Following separation, use of an emollient is recommended to prevent recurrence as outlined previously.

While treatment of labial adhesion is typically employed for urinary obstructive symptoms, we found that when queried vulvar symptoms were not uncommon and improved following labial separation in this series.

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