

URINARY INCONTINENCE AS A RESULT OF LABIAL AGGLUTINATION

Hypothesis / aims of study

Urinary incontinence remains a common problem in the postmenopausal population. It affects women of all ages but is most prevalent in the postmenopausal elderly population. It is estimated that 30 to 50% of adult women in the United States and Europe suffer from urinary incontinence.(1) Multiple etiologies have been proposed including advanced age, neurologic conditions, obesity, increased intra-abdominal pressure, cognitive/functional impairment, urinary tract infection, gravity, parity and family predisposition. However, few reports describe an association between urinary incontinence and labial agglutination. Likewise, there is a paucity of information regarding its treatment. Our objective is to present our experience with the clinical presentation and management of severe labial agglutination with associated urinary incontinence and dysfunction in a group of postmenopausal women.

Study design, materials and methods

Using diagnosis codes to identify all patients with labial agglutination, records of the Division of Gynecologic Specialties were reviewed from January 1999 to February 2006. Hospital and office records were reviewed and all subjects with labial agglutination and urinary symptoms were identified. Detailed clinical information concerning the presentation, management and outcome was extracted from the records.

Results

Five subjects with severe labial agglutination presenting with urinary incontinence were identified. The mean age was 78 and ranged from 59 to 87 years. Two subjects were on oral hormone replacement therapy at the time of presentation. All subjects presented with urinary urgency, four of them with mixed urinary incontinence and one with urge incontinence alone. Four subjects reported changes in the urinary stream during micturition. Physical examination showed near total agglutination with the introitus measuring 1cm or less and the urethra completely occluded (unable to visualize the urethra or pass a catheter) in 4 subjects. The remaining subject had agglutination of the labia minora anteriorly with partial occlusion of the urethral meatus (able to see meatus and pass a catheter). Preoperatively, 2 subjects were treated daily with topical estrogen plus steroids. A third subject received topical estrogen only and a fourth monotherapy with topical steroids. One subject was not treated topically prior to surgery. No improvement of symptoms or physical findings was seen in any of these subjects with conservative management alone. Subsequently, all subjects underwent surgical lysis of labial adhesions. This was done bluntly in 3 subjects and both bluntly and sharply in the remaining 2. Biopsies of the adhesions were obtained on 3 of the subjects. Pathology of two of the samples showed benign chronic and/or acute inflammatory changes without evidence of vulvar dystrophy. The third showed hyperkeratosis. Postoperatively all subjects were treated daily with topical estrogen and 3 received concurrent topical steroids. All subjects were asked to utilize manual separation of the labia in conjunction with these medications. At the time of their post-operative follow-up between 2 and 6 weeks, all subjects reported improvement in their urinary symptoms. Three of the five subjects had complete resolution of their urinary incontinence.

Interpretation of results

Urinary incontinence may be caused by labial agglutination. It likely stems from the impedence of urine outflow caused by labial adhesions. This in turn results in retrograde spilling of urine into the vagina followed by the leakage of urine and hence the perception of primary urinary incontinence. Operative lysis of these labial adhesions in conjunction with postoperative topical estrogen and steroids may be an effective treatment for urinary incontinence caused by labial agglutination.

Concluding message

Urinary incontinence in the presence of severe labial agglutination may be successfully treated by lysis of the labial adhesions.

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