

Figure 2. Inflammatory adenopathy of the arm.

Postvoiding Wetting in a Prepubertal Girl



7-year-old girl reported a sensation of incomplete bladder emptying with urine leakage after voiding. She had no other low urinary tract symptoms, or urinary tract infection history. She had a daily bowel movement with type-IV stool on the Bristol Stool Scale. Urinalysis did not disclose signs of urinary tract infection. Her voiding diary for 2 consecutive days demonstrated a urinary frequency of 7-8 times per day, with a maximal voided volume of 150 mL.

The results of physical examination were unremarkable, except for nearly complete fusion of labia minora with a pinhole opening and erythema of perineal area (Figure 1). Urine leakage was found during examination. Ultrasonography demonstrated an anechoic cystic lesion posterior to the urinary bladder on the transverse view, which became tubular in the longitudinal view but disappeared after voiding (Figure 2, A and B), indicating hydrocolpos. Postvoiding residual urine volume was 4.8 mL (within the normal range). Labial fusion was treated through surgical separation, followed by topical estrogen cream application.

Daytime incontinence because of different causes occurs in 3.1%-9.5% of school-age girls. Labial fusion is common among prepubertal girls with incidence rate of 1.8%, which may be underreported. Postvoiding urine accumulation in



Figure 1. Labia minora fusion.

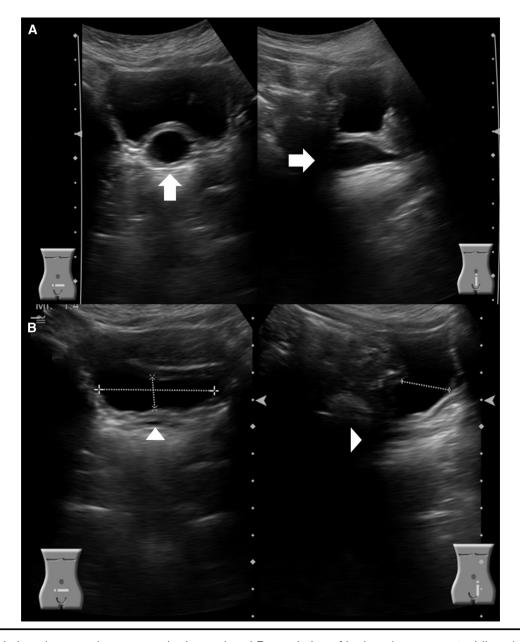


Figure 2. A, Hydrocolpos on ultrasonography (*arrows*) and **B,** resolution of hydrocolpos on postvoiding ultrasonography (*arrowheads*).

the vestibule (vesicovaginal reflux) caused by labia minora fusion is characterized by postvoiding dribbling. Thus, prepubertal girls with postvoiding leakage but without other low urinary tract symptoms should be examined for labia minora fusion with vesicovaginal reflux. After the diagnosis is made, the treatment is straightforward, with a rapid and effective treatment response.

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References

- 1. Mattsson S, Gladh G. Urethrovaginal reflux—a common cause of daytime incontinence in girls. Pediatrics 2003;111:136-9.
- 2. Leung AK, Robson WL, Tay-Uyboco J. The incidence of labial fusion in children. J Paediatr Child Health 1993;29:235-6.