

# Prepubertal vulvovaginitis

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## 1 Inflammation and irritation of the lower genital tract, or vulvovaginitis, is common in prepubertal girls

Vulvovaginitis constitutes about 62% of pediatric gynecologic problems seen in primary care.<sup>1</sup> Predisposing factors in prepubertal girls (usually defined as age 1–10 yr) include the proximity of the vagina and anus, the absence of protective pubic hair and a lack of labial fat pads.

## 2 Common presenting symptoms include pruritus, discharge, discomfort and dysuria

Most cases (70%–80%) have nonspecific causes<sup>1–3</sup> and require only reassurance and improved vulvar hygiene (Box 1). It is important to ask about prior episodes, treatments and hygiene habits (toileting, hand washing, tight-fitting clothing and bathing).

## 3 About 25% of vulvovaginitis cases in children are caused by infections

Bacteria from the gastrointestinal (*Escherichia coli*) and respiratory tracts ( $\beta$ -hemolytic streptococci, *Haemophilus influenzae*) are the most common culprits.<sup>1–4</sup> These infections present with pain, erythema and, occasionally, discharge. Vaginitis caused by *H. influenzae* is decreasing with immunization.<sup>1</sup> Vaginal yeast infections are rare in healthy girls out of diapers. Recent antibiotic use can be a predisposing factor, as can diabetes or immunodeficiency, rarely. Therefore, persistent cases warrant investigation.

## 4 Recurrent symptoms, associated with a foul smell, may be due to a foreign body in the vagina

Toilet paper is the most common foreign body found and can be flushed from the vagina with sterile saline.<sup>1</sup> Otherwise, referral to a gynecologist for vaginoscopy is necessary.

## 5 Psoriasis, atopic dermatitis and lichen sclerosus may cause chronic vulvar dermatosis

Psoriasis presents as red, nonscaly, pruritic plaques, sometimes isolated to the vulva. It is more common in children than adults.<sup>1</sup> About 15% of chronic vulvovaginitis in children is due to lichen sclerosus — a paper-white rash, in a figure-of-eight pattern around the vulva and anus. Both are treated initially with a midpotency topical steroid (e.g., clobetasol propionate 0.05%) and a low-potency steroid for maintenance (e.g., hydrocortisone 1%).<sup>1,5</sup>

### Box 1: Tips for vulvar hygiene<sup>1,3</sup>

- Removal of irritants: no baby wipes; nylons or tight-fitting clothing; wet bathing suits; bathtubs filled with soap, shampoo or bubble bath; scented detergents; washing powders; or dryer sheets. Sleep in nightgowns or long T-shirts without underwear. All underwear should be dye free.
- Cleaning: Soak the area in warm water for 10–15 minutes per day. Never scrub. Gently wipe front to back with a hypoallergenic soap. Stand up in bath to be soaped, shampooed and rinsed. Let air-dry or gently pat dry.
- Toileting: Lean forward when voiding to prevent pooling of urine in the lower vagina and always wipe front to back.

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