

Vulvar Skin Conditions— Erythematous



FAST FACTS

**ages 3–10
years**

candida vulvovaginitis is uncommon in these children who are out of diapers

diaper dermatitis

is most common in children 2–8 months

RECOMMENDED PERINEAL HYGIENE AS FOLLOWS:

- Avoid using any soap on vulva
- Apply protective barrier cream (e.g., Vaseline or 40% zinc oxide) as needed for comfort
- Use plain warm water bath to help with perineal hygiene; avoid bath bombs and bubble baths
- Voiding with legs spread apart
- Cotton-only underwear
- Avoid underwear at night when sleeping

For clinical questions about these conditions, contact:

Dermatology: 513-636-4215;
dermatology@cchmc.org

Gynecology: 513-636-9400;
gynecology@cchmc.org

Erythematous vulvar skin conditions can occur in early childhood and may present with itching or irritation of the vulva. Vulvar skin conditions are often first identified by the primary care provider, based on symptoms, clinical exam and occasionally lab assessment (culture). Consult pediatric dermatology and/or pediatric gynecology specialists if diagnosis is unclear.

ASSESSMENT

Perform a standard health history and physical exam (HPE) with specific questions about symptoms (vulvar redness, itching, burning, pain with urination or with bowel movements), contact irritants (soaps, lotions, laundry detergents, underwear, diapers, or panty liner/sanitary pads), and prior treatments. Assess for personal and family history of recent strep infection and inflammatory bowel disease.

HPE RED FLAGS

- Pre-pubertal patient
- Vulvar itch
- Vulvar erythema, yellow/green discharge (vulvovaginitis, strep infection)
- Pain with urination or defecation
- Diaper or pad distribution (contact dermatitis)
- Punched-out ulcer(s) or erosion(s) (e.g., Lipschutz or herpes)
- Edema and perianal tags/fissures/ulcers (vulvar Crohn's)
- Crusted red-brown papules on scalp, neck, axilla, and diaper distribution

MANAGEMENT/TREATMENT and WHEN TO REFER

Vulvovaginitis	Contact Dermatitis	Candidal Diaper Rash	Vulvar Crohn's
<ul style="list-style-type: none"> • Swab external vulvar skin with aerobic culture 	<ul style="list-style-type: none"> • Consider irritations and remove exposure • Apply protective barrier cream (e.g., Vaseline) as needed for comfort • Topical steroid (hydrocortisone 2.5%) as needed • Recommend sitz baths 	<ul style="list-style-type: none"> • Swab for yeast 	<ul style="list-style-type: none"> • Order fecal calprotectin or fecal lactoferrin
<ul style="list-style-type: none"> • Perineal hygiene • If strep culture is positive: prescribe amoxicillin or anti-strep antibiotic x 10–14 days 	<ul style="list-style-type: none"> • Perineal hygiene • Barrier ointments: if severe, hydrocortisone 2.5% x 5 days • Water-only wipes • Water only or laxative-grade mineral oil on cotton square/round for wiping • Unscented laundry detergent and hypo-allergenic diapers 	<ul style="list-style-type: none"> • Treat with topical azole x 3 weeks • Perineal hygiene • NOTE: Uncommon in children out of diapers or prepubertal 	<ul style="list-style-type: none"> • Perineal hygiene • NOTE: Patients with well-controlled GI Crohn's can still present with vulvar Crohn's
<p>Refer to Cincinnati Children's Gynecology if symptoms do not improve with initial treatment</p>	<p>Refer to Cincinnati Children's combined dermatology/gynecology clinic</p>	<p>Refer to Cincinnati Children's combined dermatology/gynecology clinic</p>	<p>Refer to Cincinnati Children's GI and encourage continued follow-up</p> <p>Refer to Cincinnati Children's combined dermatology/gynecology clinic</p>

If you would like additional copies of this tool, or would like more information, please contact the Physician Outreach and Engagement team at Cincinnati Children's.

Vulvar Skin Conditions—Erythematous

Patient Presents

Standard Workup

- History of Present Illness
- Family History
- Physical Exam

HPE RED FLAGS (when present, refer per chart below)

- Pre-pubertal patient
- Vulvar itch
- Vulvar erythema, yellow/green discharge (vulvovaginitis, strep infection)
- Pain with urination or defecation
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Symptoms/History

- Itch/irritation
- +/- Damp underwear
- +/- Burning with urination
- Recent strep infection
- Tenderness, pain
- +/- History of eczema
- Diapered
- +/- History of eczema
- Diapered
- Diapered
- GI complaints

Signs/Findings

- Yellow/white discharge
- Redness of vaginal introitus
- Yellow/green discharge
- Spares folds
- Involves folds
- Beefy erythema with satellite pustules or erosions with collarettes of scale
- Peau de orange/edema
- Fissures/ulcers
- Perianal tags

Diagnosis

- Non-specific Vulvovaginitis
- Strep infection—get GU culture of labia
- Irritant contact from urine/feces
- Allergic contact to wipes/diapers
- Candidal infection
- Vulvar Crohn's
NOTE: Patients with well-controlled GI Crohn's can still present with vulvar Crohn's

Recommendations

- Perineal hygiene
- Sedating antihistamine at night if pruritus severe (1 mg/kg of hydroxyzine or Benadryl)
- Perineal hygiene
- Amoxicillin or anti-strep antibiotic x 10–14 days
- Perineal hygiene
- Barrier ointments
- If severe, hydrocortisone 2.5% x 5 days
- Change to water only or laxative grade mineral oil on cotton square/round for wiping
- Perineal hygiene
- Barrier ointments
- If severe, hydrocortisone 2.5% x 5 days
- Change to water only or laxative grade mineral oil on cotton square/round for wiping
- Change to unscented laundry detergent, hypoallergenic diapers
- Perineal hygiene
- Swab for yeast
- Treat with topical azole antifungal x 3 weeks
- Barrier ointments
- If severe, hydrocortisone 2.5% x 5 days
- Change to water only or laxative grade mineral oil on cotton square/round for wiping
- Perineal hygiene
- Order fecal calprotectin/lactoferrin

Referral

- Refer to Cincinnati Children's Gynecology if symptoms do not improve with initial treatment
- Refer to Cincinnati Children's combined dermatology/gynecology clinic if symptoms do not improve with initial treatments
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- Refer to Cincinnati Children's GI and encourage continued follow-up

Refer to Cincinnati Children's combined dermatology/gynecology clinic

Recommend Perineal Hygiene

- Avoid using any soap on vulva
- Apply protective barrier cream (e.g., Vaseline or 40% zinc oxide) as needed for comfort
- Use plain warm water bath to help with perineal hygiene; avoid bath bombs and bubble baths
- Voiding with legs spread apart
- Cotton-only underwear; sleeping without underwear

For urgent issues, or to speak with the specialist on call 24/7, call the Physician Priority Link at 1-888-636-7997.