Irritant Diaper Dermatitis (Diaper Rash)

Cincinnati Children's®
changing the outcome together

FAST FACTS

over 50%
of infants are affected by irritant diaper dermatitis

1/4 of visits
in the first year of life are related to dermatologic complaints

breastfeeding
is protective against irritant diaper dermatitis

WHEN TO REFER

Refer to the Department of Dermatology at **513-636-4215** or **dermatology@cchmc.org** if:

- A red flag is present
- Extensive, severe disease is present
- Unclear diagnosis

For urgent issues or to speak with a pediatric dermatologist on call 24/7, call the Physician Priority Link® (PPL) at 513-636-7997 or 1-888-987-7997.

Irritant diaper dermatitis is an irritant contact dermatitis caused by urinary pH, fecal bacteria and residual pancreatic enzymes.

ASSESSMENT

Perform a standard health history and physical exam. Irritant diaper dermatitis presents as erythema, erosions and sometimes scaling, which typically spares the genitocrural folds.

Examine the skin for involvement, including the scalp and intertriginous sites (axillary, genitocrural).

Ask probing questions about:

- Barrier cream use (including how much is used with each diaper change)
- Diaper changing habits
- Diaper wipe use
- Previous treatments

HISTORY AND PHYSICAL EXAM RED FLAGS

- Significant involvement of the genitocrural folds
- Involvement of other intertriginous sites and/or scalp
- Perioral and acral involvement
- Rash unresponsive to frequent barrier cream application and low-strength topical corticosteroid

These could be signs of an alternative cause of the diaper eruption, such as candida infection, seborrheic dermatitis, infantile psoriasis or acrodermatitis enteropathica.

MANAGEMENT/TREATMENT

Decreasing contact with the irritants and barrier cream application are the mainstay of treatment.

For mild to moderate cases

Encourage parent to make the following lifestyle modifications:

- Frequent diaper changes
- Use of 20% zinc oxide barrier cream or other petrolatum-based emollient with every diaper change and before bedtime. Parent should apply a generous amount.
- Use of water wipes or saline or mineral oil on cotton squares. Parent should discontinue use of standard or "sensitive skin" diaper wipes.

For severe cases

- Lifestyle modifications as above
- Prescribe hydrocortisone 2.5% ointment twice daily as needed for up to 2 weeks at a time.

Prescribe a topical "-azole" medication twice daily for two weeks if secondary diaper candidiasis is present. Diaper candidiasis will present with bright red erythema of the genitocrural folds and "satellite" papules and small pustules adjacent to the diaper eruption. Patients with irritant diaper dermatitis are at high risk for developing a secondary candida infection.

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.

Tool developed by Cincinnati Children's physician-hospital organization (known as Tri-State Child Health Services, Inc.) and staff in the James M. Anderson Center for Health Systems Excellence. Developed using expert consensus and informed by Best Evidence Statements, Care Practice Guidelines, and other evidence-based documents as available. For Evidence-Based Care Guidelines and references, see www.cincinnatichildrens.org/evidence.

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Patient Presents

Standard Workup

Perform a physical exam. Examine scalp and intertriginous sites (axillary and genitocrural) to assess for involvement.

Ask about:

- Barrier cream use (including how much is used with each diaper change)
- Diaper changing habits
- Diaper wipe use
- Previous treatments

HISTORY AND PHYSICAL EXAM RED FLAGS

- Bright red erythema, significant involvement of the genitocrural folds and satellite papulopustules (could indicate primary or secondary diaper candidiasis).
- Involvement of skin outside the diaper area, including other intertriginous areas, perioral skin or acral sites.
- Rash unresponsive to frequent barrier cream application and low-strength topical corticosteroid

Concerns for Irritant Diaper Dermatitis?

For mild to moderate cases

Encourage parent to make the following lifestyle modifications:

- Frequent diaper changes
- Use of 20% zinc oxide barrier cream or other petrolatum based emollient with every diaper change and before bedtime. A generous amount needs to be applied.
- Use of water wipes or saline or mineral oil on cotton squares
- Discontinued use of standard or “sensitive skin” diaper wipes

For severe cases

- Lifestyle modifications as listed for mild to moderate cases
- Prescribe a low-strength topical corticosteroid (hydrocortisone 2.5% ointment)
- Prescribe a topical “-azole” medication twice daily for two weeks if secondary diaper candidiasis is present

Refer to Cincinnati Children’s Department of Dermatology for further evaluation and treatment if:

- A red flag is present
- Extensive, severe disease is present
- Unclear diagnosis

Controlled with above regimen?

Yes

Continue treatment

No

For urgent issues, or to speak with the specialist on call 24/7, call the Physician Priority Link® at 1-888-987-7997.