Assessment and Interventions for Diaper Dermatitis

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All infants are at risk for developing diaper dermatitis. Infants at increased risk for developing diaper dermatitis include: infants receiving antibiotics, infants receiving higher caloric density (>20 calories per ounce) breast milk or formula.

Infants with the following conditions are at high risk for diaper dermatitis: neonatal abstinence syndrome, short bowel syndrome, post pull-through procedure for Hirschsprung's disease, post ostomy closure, some enzyme therapies, and those with lack of anal sphincter tone such as myelomeningocele and bladder exstrophy.

Care Goals

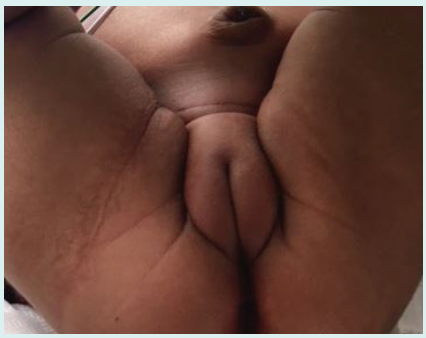
1. Maintain integrity of skin.
2. Protect skin to prevent excoriation.
3. Treat fungal infection if present.
4. Prevent further breakdown of excoriated skin.
5. Provide interventions to allow excoriated skin to heal.

Cleansing

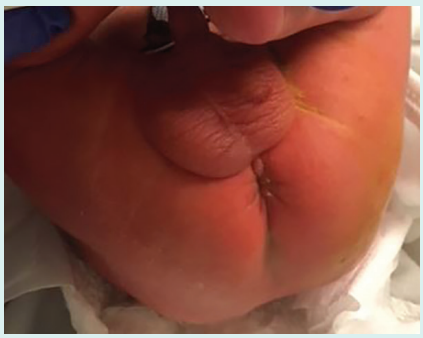
- Frequent diaper changes; recommended every two (2) hours on average or as soon as soiled.
- For each diaper change during the day, remove the soiled area and reapply barrier that has worn away.
- Use water and mild baby soap or a gentle perineal skin cleanser[1] and soft cloths/gauze.
- Diaper wipes[2] not preferred on excoriated skin.
- "Pat" to clean the area, rather than "wipe" the area.
- Once daily: Soak infant's bottom in a tub if possible or thoroughly wash. All infants should have a daily "butt bath" to get down to clean skin; assess area, then reapply barriers as needed.

Non-excoriated Skin

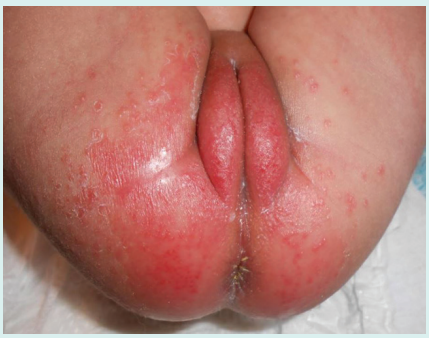
Assessment



Normal skin, no erythema/ redness, no excoriation



Erythema/redness, no excoriation



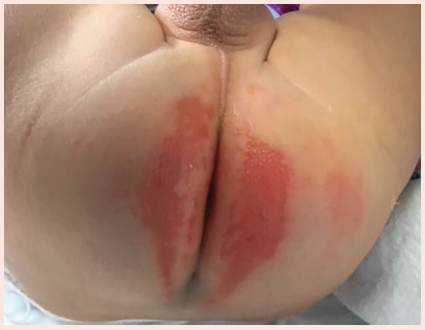
Fungal infection, no excoriation

Barrier Application

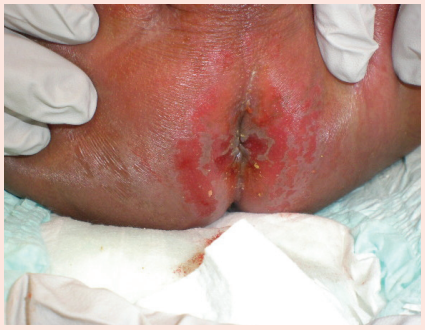
- Petrolatum ointment for infants at low risk for excoriation
- Barrier cream[3] for infants at high risk for excoriation
- Barrier film[4]
- Antifungal ointment[5]

Excoriated Skin

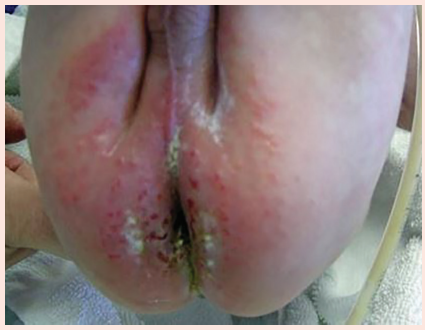
Assessment



Excoriation



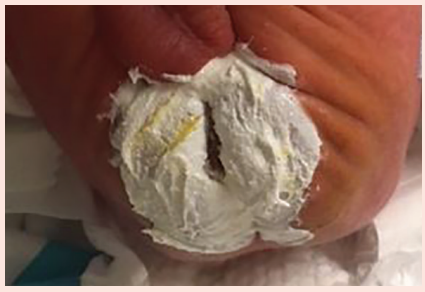
Severe excoriation



Fungal infection AND excoriation

Barrier Application

- Creams should be applied very thickly, like "frosting on a cake." With each bowel movement, gently remove the stool but do not attempt to remove all barrier cream, as friction will delay healing. Reapply a thick layer of barrier cream.
- If using Ilex it is necessary to coat the barrier with a petrolatum ointment to prevent the diaper from sticking.
- Crusting technique[6] can also be used.
- For fungal infection, use crusting technique with nystatin powder, cover with barrier film, and allow to dry. Cover this with thick coating barrier cream.
- For most severe excoriations, consult with a wound/ostomy specialist to determine if the infant is a candidate for use of a cyanoacrylate barrier product.



Product Information

[1]Gentle perineal skin cleansers have the benefit of helping to break down the stool that can be caked on, so is better than just water. A chlorhexidine based product is not recommended.

[2]Diaper wipes: it is not possible to recommend all brands of wipes as they may contain different ingredients. Some have been shown to be safe even in premature infants. Wipes are typically not preferred for excoriated skin.

[3]Barrier ointments and creams: Contain ingredients such as petrolatum, zinc oxide, carboxymethylcellulose.

Petrolatum products: Vaseline (Unilever), Aquaphor (Beiersdorf), Critic-Aid Clear (Coloplast). Zinc oxide ointment can contain from 20–40 percent zinc. Carboxymethylcellulose is found in Sensi-Care (ConvaTec), Ilex (Oakmed).

[4]Barrier films: Silicone polymers (e.g., Cavilon No Sting Barrier Film) for protection of intact skin (no excoriation).

Barriers containing cyanoacrylate: (e.g., Cavilon Advanced Skin Protectant, Marathon Liquid Skin Protectant [Medline Industries; Netherlands]). Use for the most severe excoriations under the discretion of a wound/ostomy specialist.

[5]Antifungal agents: Ointments preferred (e.g. nystatin); if rash does not respond in 24–48 hours of treatment, change to another antifungal agent (such as miconazole) because yeast may be resistant to nystatin.

[6]Crusting Technique: Use of a carboxymethylcellulose product (e.g. Stomahesive powder [ConvaTec]) with a silicone protective skin barrier (Cavilon No Sting Barrier Film [3M]) applied on top and allowed to dry into a "crust." If the infant has a combined fungal infection and severe excoriation, use the crusting technique with nystatin powder and a silicone barrier, allow to dry, then apply a thick coating of barrier cream.

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