Nappy Rash Pathway

Clinical Assessment/Management tool for Children

Healthier Together

NHS

Primary and Community Care Settings

History and Differential Diagnosis

Nappy rash is an acute inflammatory reaction of the skin in the nappy area, which is most commonly caused by an irritant contact dermatitis.

Skin irritation and alteration of its acidic pH predisposes to colonization and possible secondary infection with *Candida albicans* and bacteria (most commonly *Staphylococcus aureus* and streptococci).

Non-infective Causes

- Allergic contact dermatitis
- Psoriasis
- Infantile seborrheic dermatitis
- Atopic eczema
- Zinc deficiency

Infective Causes

- Fungal skin infection-tinea corporis
- Perianal streptococcal dermatitis
- Eczema herpeticum or coxsackium
- Scabies

Location, nature, and duration of rash.

Predisposing factors

- Type of nappy
- Use of wipes
- Diarrhoea or antibiotics

Any treatment previously tried, such as use of barrier preparations

Examination

- Features typical of nappy rash
  - Erythema, scattered papules over surfaces in contact with nappy with sparing of the inguinal skin creases
  - Skin erosions, oedema, and ulceration
- Candidiasis: white pustules, satellite lesions

- Bacterial features: erosions, golden crusting
- Examine the rest of the skin on the body
- Skin swabs are not generally recommended for the management of nappy rash as the results are difficult to interpret.

Images available at: https://dermnetnz.org/topics/napkin-dermatitis-images/

RED FLAGS AND HIGH RISK GROUPS

- Deterioration despite advice or treatment
- An alternative cause for the rash- see alternative conditions
- An immunocompromised patient and allergy
- Faltering growth

Risk factors for the development of nappy rash

- Type of nappy used — more likely with reusable cotton nappies
- Skin care practices (e.g. how often the area is cleaned and the nappy changed) prolonged skin contact with urine and faeces predisposes to irritant contact dermatitis.
- Exposure to chemical irritants — such as soaps, detergents, or alcohol-based baby wipes.
- Skin trauma — for example, mechanical friction from skin contact with nappies or over-vigorous cleaning.
- Medication — recent broad-spectrum antibiotics, in particular, predispose to candida colonization; other drugs that increase stool frequency may also increase the risk.
- Gestational age — pre-term infants are at increased risk of developing nappy rash and secondary infection due to the reduced barrier function of immature skin.
- Diarrhoea — including conditions associated with increased stool volume and pH, such as gastroenteritis, malabsorption, and liver conditions such as hepatitis (rare)

Stage	Features	Management
Mild	• Mild erythema, mild scaling and asymptomatic	• Barrier preparations to protect the skin, which are available to buy over-the-counter. • Advise to apply thickly at each nappy change. • Options include ProShield, Metanium® ointment, bepanthen and white soft paraffin BP ointment.
Moderate	• Moderate erythema, oedema and discomfort	• Topical hydrocortisone 1% cream BD until symptoms settle. • Apply hydrocortisone after bathing and wait 30 minutes before applying the barrier preparation. • Keep using barrier preparation with every nappy change
Severe	• Skin erosions, oedema and ulceration	• Use barrier preparation in addition to trimovate top BD for 1 week
Candida Infection	• Satellite lesions, white papules	• Prescribe Canesten HC or daktacort for 1-2 weeks until rash cleared and to continue for a further 1 week after the rash has cleared
Bacterial Infection	• Erosions, golden crusting	• Topical trimovate bd for 7-10 days. If no improvement- flucloxacillin for 7 days. (Clarithromycin for 7 days if penicillin allergy). Caution – very rare to have a bacterial infection and also oral antibiotics can worsen nappy rash due to diarrhoea

Consider referral to a paediatric dermatologist if:

- There is uncertainty about the diagnosis.
- The rash persists despite optimal treatment in primary care.
- There are recurrent, severe unexplained episodes.

This guidance has been reviewed and adapted by healthcare professionals across North East and North Cumbria with consent from the Hampshire development groups.