## Introduction

Nappy Rash (Napkin Dermatitis) describes a spectrum of symptoms in the nappy area ranging from mild perineal erythema (redness) to associated infection and cellulitis. It occurs in 50% of infants and peaks from 9-12 months. Prompt treatment is advised in patients with increased risk of skin breakdown such as neonates (O’Brien 2008) and infants with poor nutrition. Most napkin dermatitis is caused by an irritant and is then termed ‘Irritant Dermatitis’.

### Causes of Irritant Dermatitis:
- The main cause is prolonged exposure to urine and faeces on the skin
- High humidity in the nappy area can cause softening of the stratum corneum allowing greater penetration of irritants
- In hospitalised patients diarrhoea can often occur secondary to antibiotic or medication therapy
- Components of topical cleansers
- Barrier creams
- Rarely nappies
- Friction

Nappy Rash is not always due to irritant dermatitis, and may need review by dermatologist for differential diagnosis
- Allergic contact nappy rash
- Seborrhoeic dermatitis
- Candidiasis
- Lichen Sclerosis
- Herpes
- Psoriasis
- Overflow incontinence

## Care of the Child with Nappy Rash

<table>
<thead>
<tr>
<th>ACTION</th>
<th>RATIONALE &amp; REFERENCE</th>
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<tbody>
<tr>
<td>Decontaminate hands thoroughly before procedure and apply non sterile gloves as per hospital policy</td>
<td>To prevent cross infection (OLCHC, 2010, Sari 2009)</td>
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<tr>
<td>Change wet or soiled nappies promptly and frequently</td>
<td>Frequency of nappy changes will be dictated by the age of the child but should generally take place as soon as soiling takes place to reduce contact time of moisture (O’Brien 2009).</td>
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<td>Assess the skin condition of the nappy area</td>
<td>An accurate assessment of skin condition is necessary for correct treatment (Trigg and Mohammed, 2010).</td>
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<tr>
<td>- erythema</td>
<td>Soap products can lead to drying of the skin and may affect the pH, further facilitating the action of faecal enzymes (O’Brien 2009)</td>
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<tr>
<td>- erosions</td>
<td></td>
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<td>- ulcerations</td>
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<td>- bleeding</td>
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<tr>
<td>- satellite pustules (which indicate candidiasis)</td>
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<td>- record improvement or deterioration of rash.</td>
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<tr>
<td>Gently clean skin with warm water and emollient based product such as Silcock’s base, avoiding soap.</td>
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<tr>
<td>Apply emollient * to a wet cloth and cleanse the nappy area. Remove any residue with a clean wet cloth and dry area thoroughly</td>
<td>To avoid contamination of the urethra with faeces (Trigg)</td>
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<td><strong>Female:</strong> Cleanse from front to back of genital area</td>
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Gently pat dry with a soft dry wipe, paying particular attention to skin creases.

Liberally apply a protective barrier cream after every change. Use a water repellent ointment such as white soft paraffin.

Remove gloves and decontaminate hands thoroughly after procedure.

A bright red rash with satellite lesions indicate a candida infection which should be treated with an anti-fungal ointment.

When erythema is noted: Assess each child individually and a cream or ointment will be recommended, suitable to the child's needs:

- **Orabase®**: Absorbs moisture and protects skin.
- **Cavilon®**: No Sting Barrier Spray - a transparent vapour providing a permeable yet protective barrier film.
- **Metanium®**: Dab a small amount over affected area with fingertip. Spread thinly so skin texture can be seen through it.

Provide education and support parents to manage their child's nappy rash (Trigg and Mohammed 2010).

If steroid cream is used, discontinue after the prescribed time and reassess rash.

If after following the above steps for approximately 5 days the nappy rash remains severe or is not improving consider other possible causes and liaise with Dermatology team.

Record all care given.

To ensure skin is dry and to prevent further irritation of the skin.

Petrolatum additives have been shown to be effective to support skin barrier function (Adams 2008).

According to hand hygiene policy (OLCHC 2010)

Candida albicans infection usually presents following systemic antibiotic therapy (O’Brien 2008).

Need only apply two or three times a day.

Care must be taken in the removal and reapplication with Metanium due to its thick texture (Ratliff et al 2007).

To facilitate communication, to provide evidence of care and to enable evaluation of the effectiveness of the care. (An Bord Altranais, 2002).

The wet occlusive environment inside a nappy increases the systemic absorption.

To ensure effective communication (An Bord Altranais 2002, National Hospitals Office, 2009)

*Note*: Olive Oil has been used in some situations to clean the skin of a child with nappy rash. However, there is no research evidence to support this practice. Avoid using Olive Oil as a cleanser in this situation. An emollient can be used instead.

REFERENCES


Our Lady’s Children’s Hospital (OLCHC) (2010a) *Guideline for Hand Hygiene*, OLCHC, Dublin.


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