Incontinence Associated Dermatitis

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Prevalence of IAD

**Incontinence- associated dermatitis:**
- A reactive response of the skin to chronic exposure to urine and faecal material which could be observed as an inflammation and erythema with or without erosion or denudation. (Gray et al. 2007)

**Size of the problem:**
- Prevalence of IAD: between 5.6% to 50%
- Belgium (2008): 5.7% (1131/19968)
- Incidence rates: between 3.4% and 25% (Gray et al. 2007)
- Survey (1911 caregivers) (2007)
  - 90.4% observed that type of lesion in their daily practice
  - Confusion about prevention
    - IAD is not a pressure ulcer (73.5%)
    - … but should be prevented as a pressure ulcer (61.5%)
Aetiology

MOISTURE

Urine
- Urea-ammonia
- pH
- Microbes

Faeces
- Faecal enzyme activ.
- pH
- Microbes

Double incontinence
- Urea-ammonia
- pH
- Faecal enzyme activ.
- Microbes

Frequent cleansing
- Chemical irritation
  +
- Physical irritation

Permeability of the skin
- ↑
- ↓ Barrier-function

Bacterial overgrowth

Cutaneous infection

WEAKENED SKIN

INCONTINENCE ASSOCIATED DERMATITIS

FRICTION: Rubbing perineal skin over containment devices, clothing and bed or chair surfaces

(Beeckman et al. 2008)
Impact on skin

- Etiologic factors associated with IAD include:
  - Prolonged exposure to urine;
  - Prolonged exposure to stool;
  - Prolonged exposure to both urine and stool.

- A **hyperhydrated skin** is more susceptible to mechanical damage associated with friction.

- Existing research and clinical experience strongly suggest that **liquid stool**, or **stool in combination with urine**, is more damaging to the skin than either urine or solid stool alone.
Clinical Characteristics

- Clinical characteristics of IAD include
  - blanchable erythema
  - Glistening appearance of the skin due to serous exudate
  - Partial thickness skin loss (denudation, erosion, abrasion or superficial ulceration of the injured skin)
  - Vesicles (bullae) containing clear exudate
## Differentiation

<table>
<thead>
<tr>
<th>IAD</th>
<th>Pressure ulcer</th>
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</thead>
<tbody>
<tr>
<td><strong>Cause</strong></td>
<td>Moisture (+ friction)</td>
</tr>
<tr>
<td><strong>Location</strong></td>
<td>Peri-anal (anal cleft)</td>
</tr>
<tr>
<td><strong>Shape</strong></td>
<td>Diffuse – Kissing ulcer</td>
</tr>
<tr>
<td><strong>Depth</strong></td>
<td>Superficial</td>
</tr>
<tr>
<td><strong>Necrosis</strong></td>
<td>-</td>
</tr>
<tr>
<td><strong>Edges</strong></td>
<td>Diffuse - irregular</td>
</tr>
<tr>
<td><strong>Colour</strong></td>
<td>Redness is not egal</td>
</tr>
</tbody>
</table>
Differentiation
Differentiation

Intertrigo Intertrigo

... source of the irritant in intetriginous inflammation is perspiration.
Quiz

Prevention and Management of IAD

• Gentle perineal cleansing (avoid soap and water / frequent cleansing)
  – No rinse skin cleansers
  – Neutral/acidic pH

• Moisturisation

• Skin protection

• Supporting interventions
  – Absorbent pads
  – Faecal collection devices/faecal management systems
  – Urinary catheters
IAD Research

• Lack of evidence
  – Prevention
  – Treatment

• International IAD research group set up
  May 2012 – Ghent

• Planned Cochrane Review

• Laboratory Studies

• Clinical Studies
Further Reading
