Incontinence Associated Dermatitis (IAD) Best Practice Principles

Updated July 2021

NSW GOVERNMENT

CLINICAL EXCELLENCE COMMISSION

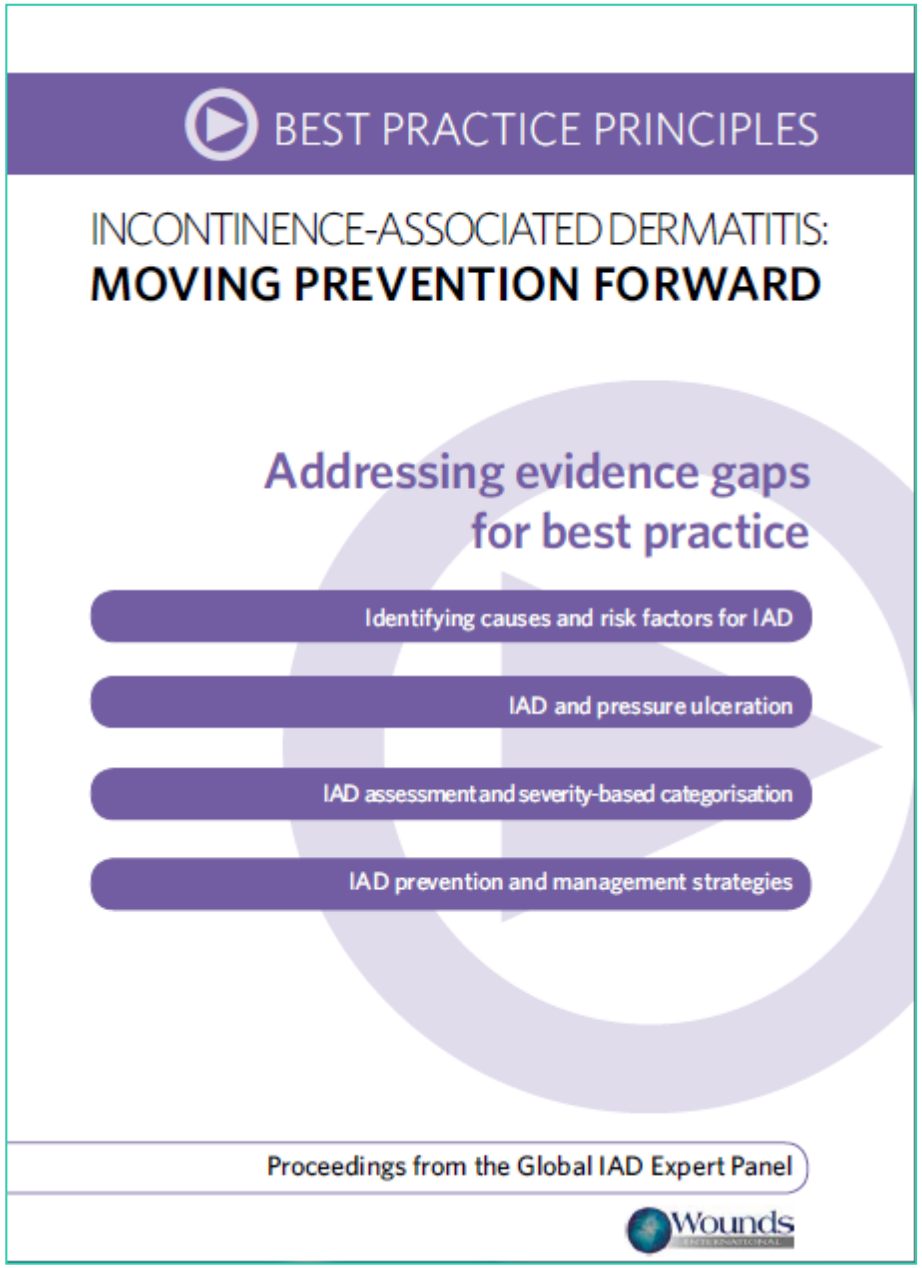
Aims

- To provide evidence based information to improve clinical knowledge about Incontinence Associated Dermatitis (IAD)
- To assist clinicians to differentiate between IAD and Pressure Injury (PI)
- To improve knowledge of appropriate IAD prevention strategies.

Best practice principles

The following slides are a summary of the Best Practice Principles

Note: Information applies to people 18 years and older



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What is IAD?

IAD is a type of irritant contact dermatitis (inflammation of the skin) found in people with faecal and/or urinary incontinence

Terms that have been used for IAD include:

- Diaper/napkin/nappy dermatitis
- Diaper/napkin/nappy rash
- Irritant dermatitis
- Moisture lesions
- Perineal dermatitis
- Perineal rash

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How many people are affected with IAD?

Data suggest IAD is a common problem in healthcare settings. Studies have estimated that it has:

Prevalence (i.e. proportion of patients with IAD at a defined point in time) of 5.6% - 50%

Incidence (i.e. proportion of patients who develop IAD over time) of 3.4% - 25%.

Recognising IAD

- In individuals with light skin, IAD appears initially as erythema which can range from pink to red.
- In individuals with darker skin tones, skin may be paler, darker, purple, dark red or yellow.
- The affected area usually has poorly defined edges and may be patchy or continuous over large areas.

Recognising IAD (continued)

- IAD can cause discomfort, pain, burning, itching or tingling in the affected areas.
- Pain may be present even when the epidermis is intact.

Depending on the extent of contact with urine and/or faeces, IAD may affect large areas of skin, not just the skin of the perineum

How does incontinence cause IAD

IAD represents disruption to the normal barrier function of the skin, which triggers inflammation

Key mechanisms involved are overhydration of the skin and an increase in pH

IAD & skin barrier function

- With exposure to urine and/or faeces, skin becomes more alkaline. This occurs because skin bacteria convert the substance urea (a product of protein metabolism found in urine) to ammonia which is alkaline.
- People with faecal incontinence +/- urinary incontinence are at higher risk of developing IAD than those with urinary incontinence alone.

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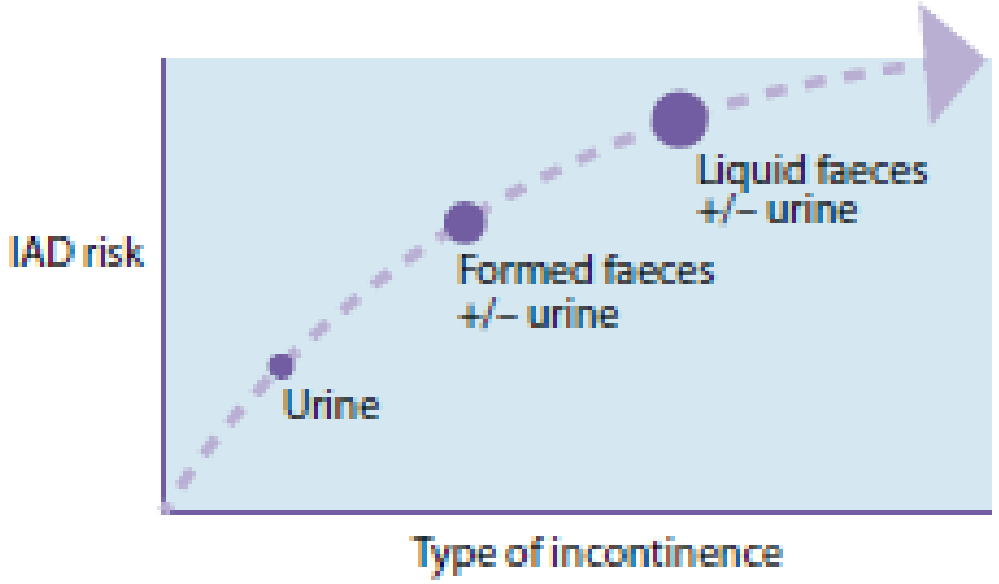
IAD & skin barrier function

People with faecal incontinence +/- urinary incontinence are at higher risk of developing IAD than those with urinary incontinence alone



Faeces acts as a direct chemical irritant to the skin and loose stools increase the risk and severity of IAD

Does IAD contribute to PI development?

People vulnerable to skin injury from pressure and shear are also likely to be vulnerable to skin damage resulting from moisture, friction and irritants

Incontinence is a risk factor for pressure injuries, but IAD can occur in the absence of any other pressure injury-associated risk factors and vice versa

IAD and PI can both be present

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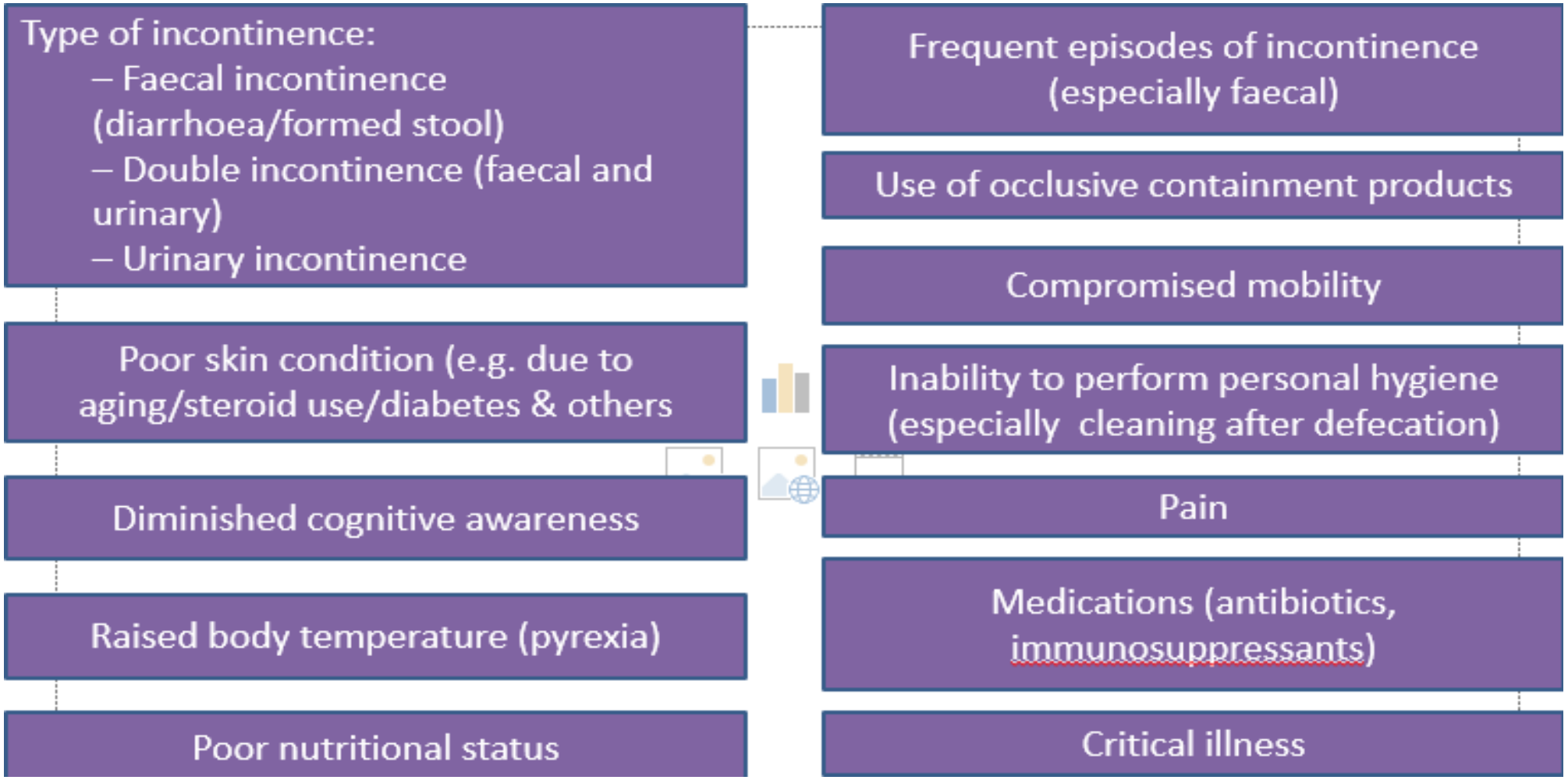
Identifying patients at risk of IAD



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Identifying patients at risk of IAD

The presence of any urinary and/or faecal incontinence, even in the absence of other risk factors, should trigger implementation of an appropriate IAD prevention protocol to minimise/prevent exposure to urine and stool and protect skin

IAD assessment

Assessment for IAD should be incorporated into a general skin assessment and performed as part of a pressure injury prevention/continence care program

Inspect areas of skin that may be affected: perineum, perigenital areas, buttocks, gluteal fold, thighs, lower back, lower abdomen and skin folds (groin, under large abdominal apron, etc.) for:

- Erythema
- Maceration
- Signs of fungal or bacterial skin infection
- Erosion or denudation
- Presence of lesions (vesicles, papules, pustules, etc.)

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IAD assessment & documentation

Document findings and any appropriate actions required in patient's healthcare records

Assessment and documentation of continence status should also include deviations from normal bladder and/or bowel function and any follow-up actions

IAD severity categorisation tool

Clinical presentation	Severity of IAD	Signs**
	No redness and skin intact (at risk)	Skin is normal as compared to rest of body (no signs of IAD)
	Category 1 – Red* but skin intact (mild)	Erythema +/-oedema
 moderate  severe	Category 2 – Red* with skin breakdown (moderate-severe)	As above for Category 1 +/-vesicles/bullae/skin erosion +/- denudation of skin +/- skin infection

* Or paler, darker, purple, dark red or yellow in patients with darker skin tones

**If the patient is not incontinent, the condition is not IAD

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Distinguishing IAD from pressure injury (PI)

It is often difficult for clinicians to correctly identify IAD and to distinguish it from PI (Stage 1 or 2).

If the person is not incontinent, the condition is not IAD

Correct assessment and diagnosis of IAD is important and necessary to ensure that:

- the person receives appropriate treatment
- documentation is accurate
- quality reporting can be facilitated.

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Distinguishing IAD from pressure injury

Parameter	IAD	Pressure injury
History	Urinary and/or faecal incontinence	Exposure to pressure/shear
Symptoms	Pain, burning, itching, tingling	Pain
Location	Affects perineum, perigenital, peristomal area; buttocks; gluteal fold; medial and posterior aspects of upper thighs; lower back; may extend over bony prominence	Usually over bony prominence or associated with location of a medical device
Shape/edges	Affected area is diffuse with poorly defined edges/ may be blotchy	Distinct edges or margins 
Presentation/depth	Intact skin with erythema (blanchable/non-blanchable), with/without superficial/ partial-thickness skin loss 	1. Presentation varies from intact skin with non-blanchable erythema to full-thickness skin loss 2. Base of wound may contain non-viable tissue 
Other	Secondary superficial skin infection (e.g. candidiasis) may be present	Secondary soft tissue infection may be present

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Distinguishing IAD from PI

Assessment relies on clinical observation and visual inspection. No bedside (point-of-care) technologies are available to aid in the assessment and diagnosis of IAD

If the aetiology of erythema is not clear a standard bundle of interventions for the management of both IAD and PI prevention should be implemented and reviewed to assess anticipated response

Prevention & management of IAD

Key interventions that are critical for the prevention and management of IAD:

- Manage incontinence to identify and treat reversible causes (e.g. urinary tract infection, constipation, diuretics) to reduce, or ideally eliminate skin contact with urine and/or faeces.
- Implement a structured skin care regimen to protect the skin exposed to urine and/or faeces and help restore an effective skin barrier function.
- Appropriate use of pads containing super absorbent polymer.

Prevention & management of IAD

Prevention of IAD should be aimed at all incontinent people with the aim of promoting positive outcomes and avoidance of injury and harm

There should be visible improvement in the skin condition and reduction in pain in 1–2 days following the implementation of an appropriate skin care regimen, with resolution within 1–2 weeks. For people who continue to have unresolved continence issues, seek advice from specialist continence advisors, where possible

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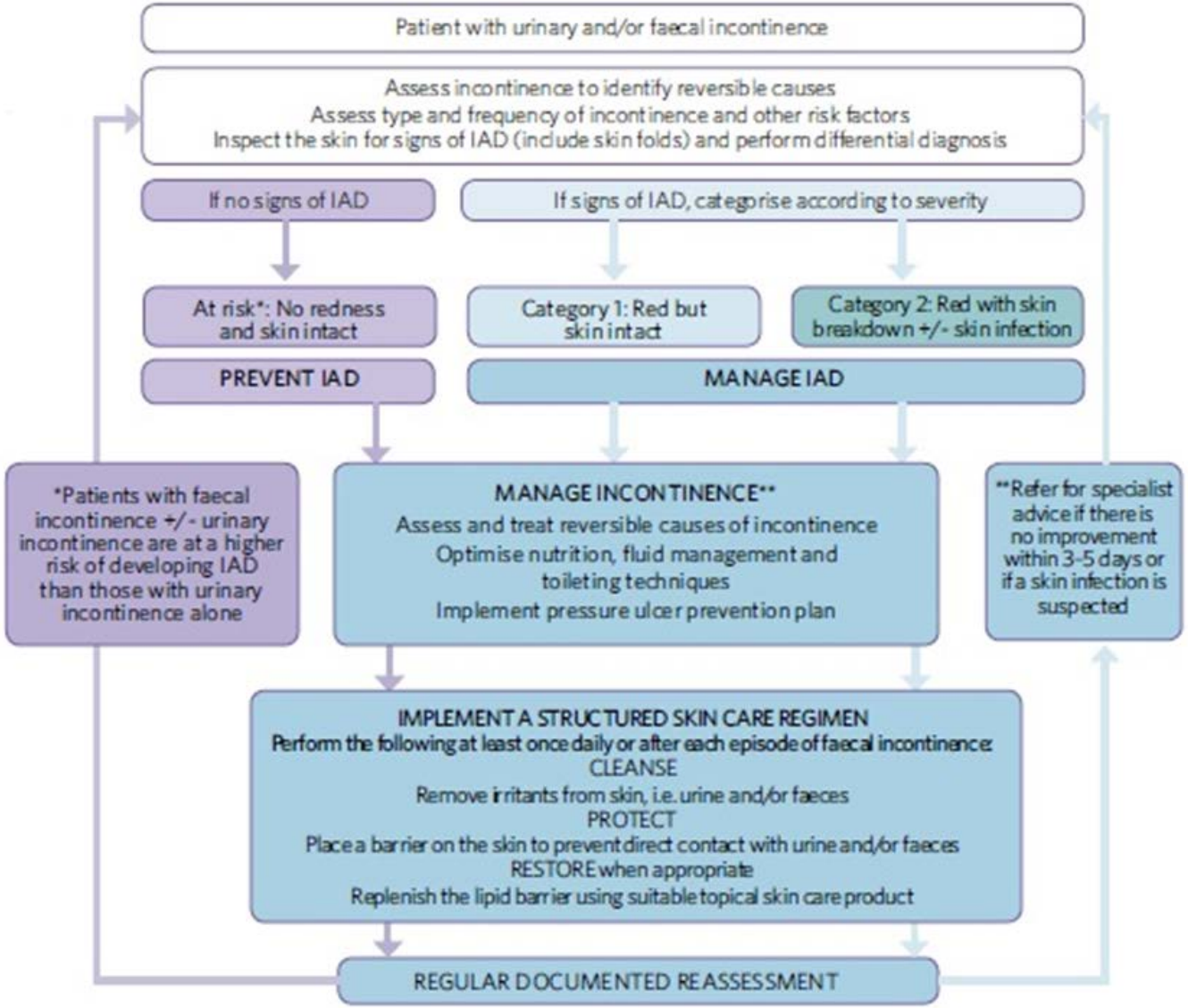
Prevention & management of IAD



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Prevention & management of IAD

A skin cleanser with a pH range similar to normal skin is preferred over traditional soap. This should be labelled as being indicated or suitable for use in the management of incontinence

Structured skin care regimens that incorporate gentle cleansing and the use of skin protectants have been shown to reduce the incidence of IAD. This may also be associated with a reduction in the development of Stage I PI

Prevention & management of IAD

Implement a structured skin care regimen, key interventions:

- Cleansing the skin to remove urine and/or faeces, i.e. the source of irritants that cause IAD. This should be done prior to the application of a skin protectant as part of a routine process to remove urine and faeces

- Protecting the skin to avoid or minimise exposure to urine and/or faeces and friction.

Prevention & management of IAD

Patient with urinary+/- faecal incontinence	ACTIONS			
	MANAGE INCONTINENCE EDUCATE PATIENTS AND CAREGIVERS	CLEANSE*, PROTECT** & RESTORE***		REFER FOR SPECIALIST ADVICE if there is no improvement within 3–5 days OR if a skin infection is suspected
No redness and skin intact (at risk)		**PREVENTION: select option 1 or 2**		
		1	Continence care wipe (3-in-1: cleanser + skin protectant + moisturiser) **ADD** skin protectant (e.g. dimethicone-containing product) if extra skin protection is required	
		2	Skin cleanser OR bathing/cleansing wipe **PLUS** Skin protectant (e.g. acrylate terpolymer film or petrolatum-based product or dimethicone-containing product)	
Category 1 – Red but skin intact (mild)		**MANAGEMENT: select option 1 or 2**		
		1	Continence care wipe (3-in-1: cleanser + skin protectant + moisturiser) **ADD** skin protectant (e.g. acrylate terpolymer barrier film) if worsening erythema/skin condition	
		2	Skin cleanser OR bathing/cleansing wipe **PLUS** Skin protectant (e.g. acrylate terpolymer barrier film or dimethicone-containing product)	
Category 2 – Red with skin breakdown (moderate-severe)		1	Continence care wipe (3-in-1: cleanser + skin protectant + moisturiser) **ADD** skin protectant (e.g. acrylate terpolymer barrier film) if worsening erythema/skin condition	
		2	Skin cleanser OR bathing/cleansing wipe **PLUS** Skin protectant (e.g. acrylate terpolymer barrier film, dimethicone-containing product or zinc oxide based ointment or paste)	
			AND consider containment devices (e.g. FMS/faecal pouch)	
Plus skin infection			As for Category 2 **PLUS** Take a microbiological sample when possible and use result to decide on appropriate therapy (e.g. antifungal cream, topical antibiotic, anti-inflammatory product)	

*Cleansing should take place daily and after each episode of faecal incontinence

**Skin protectants should be applied according to the manufacturer's instructions

***For skin that is overhydrated or where maceration is present, do not use skin care products that trap moisture or are formulated to attract moisture

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Prevention & management of IAD

The expert panel recommends that the skin of people who are incontinent should be cleansed at least once daily and after each episode of faecal incontinence

Clinicians and caregivers should check the ingredients of any product to be applied to the skin to ensure it does not contain any substance to which the person is sensitive or allergic
and is indicated for use in people with incontinence

A skin care product or combination product that has skin protective/restorative actions is recommended to prevent IAD in at risk people

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Too many layers cause lots of problems

- Increases friction and shearing
- Increases heat
- Increases moisture and prevents airflow
- Impairs microclimate
- Negates the effect of the active mattress
- Increases PI risk.

Coyer (2015), NPUAP & EPUAP Guidelines (2015), Suttle, Dockery and Patterson, 2014), Williamson and Sauser (2009), Wounds International (2010)

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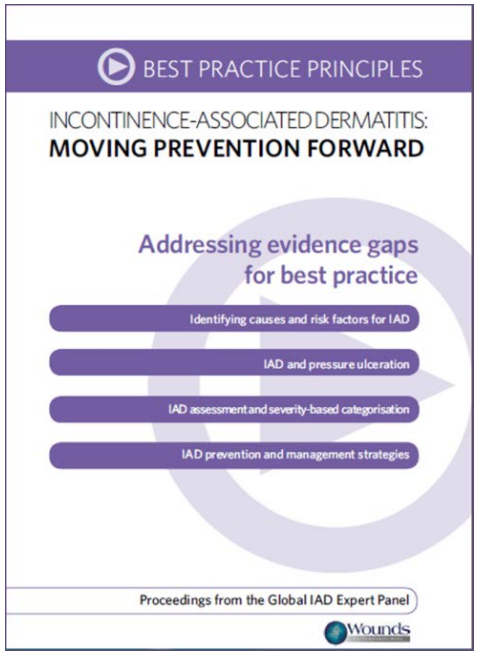

Questions

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