



Ghent Global IAD Categorisation Tool

# THE GHENT GLOBAL IAD CATEGORISATION TOOL

Version 1.0 June 2017









#### **PREFACE**

Incontinence-associated dermatitis (IAD) is a specific type of irritant contact dermatitis characterized by erythema and oedema of the peri-anal or genital skin. In some cases, IAD is accompanied by bullae, erosion or secondary cutaneous infection (Gray et al., 2012). The aetiology of IAD is complex and multifactorial (Beeckman et al., 2009). Excessive skin surface moisture resulting in skin maceration, chemical, and physical irritation enhances the permeability of the skin compromising the skin barrier function (Mugita et al., 2015).

IAD prevalence and incidence figures vary by type of setting and populations. The prevalence of IAD is estimated between 5.7 and 22.8%, and the incidence of IAD between 3.4 and 50% (Gray et al., 2012). These differences may be explained by the lack of internationally agreed diagnostic criteria and the potential confusion with superficial pressure ulcers or other skin conditions (Beeckman et al., 2007). A recent Cochrane review revealed a substantial heterogeneity of reported outcomes and instruments in IAD research (Beeckman et al., 2016).

We are pleased to introduce the Ghent Global IAD Categorisation tool (GLOBIAD). The tool is the result of a two-year project involving 22 international experts and 823 clinicians from 30 countries. The GLOBIAD categorises IAD severity based on visual inspection of the affected skin areas. It aims to create an internationally agreed description of IAD severity, and to standardize the documentation of this condition in clinical practice and research.

The GLOBIAD is now available for introduction in clinical practice. We welcome any feedback and translations of the GLOBIAD in languages other than English. Please contact us via SKINT@UGent.be.

#### Kind regards

#### Dimitri Beeckman, RN, PhD

Professor of Skin Integrity and Clinical Nursing Ghent University, University Centre for Nursing and Midwifery, Skin Integrity Research Group (SKINT), Belgium

#### Karen Van den Bussche, RN, MSc

PhD student

Ghent University, University Centre for Nursing and Midwifery, Skin Integrity Research Group (SKINT), Belgium

#### Jan Kottner, RN, PhD

Scientific Director

Charité-Universitätsmedizin Berlin, Clinical Research Center for Hair and Skin Science, Germany

#### HOW TO CITE THIS DOCUMENT

Beeckman D., Van den Bussche K., Alves P., Beele H., Ciprandi G., Coyer F., de Groot T., De Meyer D., Dunk A.M., Fourie A., García-Molina P., Gray M., Iblasi A., Jelnes R., Johansen E., Karadağ A., LeBlanc K., Kis Dadara Z., Long M.A., Meaume S., Pokorna A., Romanelli M., Ruppert S., Schoonhoven L., Smet S., Smith C., Steininger A., Stockmayr M., Van Damme N., Voegeli D., Van Hecke A., Verhaeghe S., Woo K. and Kottner J. The Ghent Global IAD Categorisation Tool (GLOBIAD). Skin Integrity Research Group - Ghent University 2017. Available to download from www.UCVVGent.be

© Beeckman D. & Van den Bussche K., 2017





#### Category 1: Persistent redness

#### 1A - Persistent redness without clinical signs of infection



 Persistent redness A variety of tones of redness may be present.
Patients with darker skin tones, the skin may be paler or darker than normal, or purple in colour,

#### Additional criteria

- Marked areas or discolouration from a previous (healed) skin defect
- Shiny appearance of the skinMacerated skin
- Intact vesicles and/or bullae
- Skin may feel tense or swollen at palpation
- · Burning, tingling, itching or pain

#### 1B - Persistent redness with clinical signs of infection



#### Critical criteria

- Persistent redness variety of tones of redness may be present. Patients with darker skin tones, the skin may be paler or darker than normal. or purple in colour
- Signs of infection Such as white scaling of the skin (suggesting a fungal infection) or satellite lesions (pustules surrounding the lesion, suggesting a Candida albicans fungal infection).

#### Additional criteria

- Marked areas or discolouration from a previous (healed) skin defect
- Shiny appearance of the skin
- Macerated skin
- Intact vesicles and/or bullae
- The skin may feel tense or swollen at palpation
- Burning, tingling, itching or pain

#### 🗕 Category 2: Skin loss 🗕

#### 2A - Skin loss without clinical signs of infection



#### Critical criterion

Skin loss may present as skin erosion (may result from damaged/eroded vesicles or bullae), denudation or excoriation.

The skin damage pattern may be diffuse.

- Persistent red
- A variety of tones of redness may be present. Patients with darker skin tones, the skin may be paler or darker than normal, or purple in colour
- Marked areas or discolouration from a previous (healed) skin defect
- Shiny appearance of the skin
- Macerated skin
- Intact vesicles and/or bullae
- Skin may feel tense or swollen at palpation
- Burning, tingling, itching or pain

#### 2B - Skin loss with clinical signs of infection



#### Critical criteria

- Skin loss Skin loss may present as skin erosion (may result from damaged/ eroded vesicles or bullae), denudation or excoriation. The skin damage pattern may be diffuse.
- Signs of infection

Such as white scaling of the skin (suggesting a fungal infection) or satellitte lesions (pustules surrounding the lesion, suggesting a Candida albicans fungal infection), slough visible in the wound bed (yellow/brown/greyish), green appearance within the wound bed (suggesting a bacterial infection with Pseudomonas aeruginosa), excessive exudate levels, purulent exudate (pus) or a shiny appearance of the wound bed.

#### Additional criteria

- Persistent redness
- A variety of tones of redness may be present. Patients with darker skin tones
- the skin may be paler or darker than normal, or purple in colour
- Marked areas or discolouration from a previous (healed) skin defect
   Shiny appearance of the skin
- Macerated skin
- Intact vesicles and/or bullae
- Skin may feel tense or swollen at palpation





Beeckman D, Van den Bussche K, Alves P, Beele H, Ciprandi G, Coyer F, de Groot T, De Meyer D, Dunk AM, Fourie A, García-Molina P, Gray M, lblasi A, Jelnes R, Johansen E, Karadağ A, LeBlanc K, Kis Dadara Z, Long MA, Meaume S, Pokorna A, Romanelli M, Ruppert S, Schoonhoven L, Smet S, Smith C, Steininger A, Stockmayr M, Van Damme N, Voegeli D, Van Hecke A, Verhaeghe S, Woo K & Kottner J. The Ghent Global IAD Categorisation Tool (GLOBIAD). Skin Integrity Research Group- Ghent University 2017



The categories do not necessarily relate to the natural history of IAD and are not intended to suggest how IAD may develop or progress. This categorisation tool may prove useful in the monitoring of IAD prevalence and incidence, and for research purposes.





### **CATEGORY 1: PERSISTENT REDNESS**

### Category 1A: Persistent redness without clinical signs of infection

#### Critical criterion

#### Persistent redness

A variety of tones of redness may be present. Patients with darker skin tones, the skin may be paler or darker than normal, or purple in colour.

#### Additional criteria

- Marked areas or discolouration from a previous (healed) skin defect
- Shiny appearance of the skin
- Macerated skin
- Intact vesicles and/or bullae
- Skin may feel tense or swollen at palpation
- Burning, tingling, itching or pain



### Category 1B: Persistent redness with clinical signs of infection

#### Critical criteria

#### Persistent redness

A variety of tones of redness may be present. Patients with darker skin tones, the skin may be paler or darker than normal, or purple in colour.

#### Signs of infection

Such as white scaling of the skin (suggesting a fungal infection) or satellite lesions (pustules surrounding the lesion, suggesting a Candida albicans fungal infection).

#### Additional criteria

- Marked areas or discolouration from a previous (healed) skin defect
- Shiny appearance of the skin
- Macerated skin
- Intact vesicles and/or bullae
- Skin may feel tense or swollen at palpation
- Burning, tingling, itching or pain







#### **CATEGORY 2: SKIN LOSS**

#### Category 2A: Skin loss without clinical signs of infection

#### <u>Critical criterion</u>

#### Skin loss

Skin loss may present as skin erosion (may result from damaged/eroded vesicles or bullae), denudation or excoriation. The skin damage pattern may be diffuse.

#### Additional criteria

Persistent redness

A variety of tones of redness may be present. Patients with darker skin tones, the skin may be paler or darker than normal, or purple in colour

- Marked areas or discolouration from a previous (healed) skin defect
- Shiny appearance of the skin
- Macerated skin
- Intact vesicles and/or bullae
- Skin may feel tense or swollen at palpation
- Burning, tingling, itching or pain



### Category 2B: Skin loss with clinical signs of infection

#### Critical criteria

#### Skin loss

Skin loss may present as skin erosion (may result from damaged/eroded vesicles or bullae), denudation or excoriation. The skin damage pattern may be diffuse.

#### Signs of infection

Such as white scaling of the skin (suggesting a fungal infection) or satellite lesions (pustules surrounding the lesion, suggesting a Candida albicans fungal infection), slough visible in the wound bed (yellow/brown/greyish), green appearance within the wound bed (suggesting a bacterial infection with Pseudomonas aeruginosa), excessive exudate levels, purulent exudate (pus) or a shiny appearance of the wound bed.

#### Additional criteria

Persistent redness

A variety of tones of redness may be present. Patients with darker skin tones, the skin may be paler or darker than normal, or purple in colour

- Marked areas or discolouration from a previous (healed) skin defect
- Shiny appearance of the skin
- Macerated skin
- Intact vesicles and/or bullae
- Skin may feel tense or swollen at palpation
- Burning, tingling, itching or pain







#### **GLOSSARY**

Bulla A circumscribed lesion > 1 cm in diameter that contains liquid (clear, serous or haemorrha-

gic), a large blister

**Erosion** Loss of either a portion of or the entire epidermis

**Excoriation** A loss of the epidermis and a portion of the dermis due to scratching or an exogenous injury

**Maceration** An appearance or surface softening due to constant wetting - frequently white

**Papule** An elevated, solid, palpable lesion that is  $\leq 1$  cm in diameter

**Pustule** A circumscribed lesion that contains pus

**Scale** A visible accumulation of keratin, forming a flat plate or flake

**Swelling** Enlargement due to accumulation of oedema or fluid, including blood

**Vesicle** A cicumscribed lesion ≤ 1 cm in diameter that contains liquid (clear, serous or haemorrhagic),

a small blister

#### **REFERENCES**

Beeckman D, Schoonhoven L, Fletcher J, Furtado K, Gunningberg L, Heyman H, Lindholm C, Paquay L, Verdú J and Defloor T. EPUAP classification system for pressure ulcers: European reliability study. Journal of advanced nursing 2007; 60: 682-91.

Beeckman D, Schoonhoven L, Verhaeghe S, Heyneman A, Defloor T. Prevention and treatment of incontinence-associated dermatitis: literature review. Journal of advanced nursing 2009; 65: 1141-54.

Beeckman D, Van Damme N, Schoonhoven L, Van Lancker A, Kottner J, Beele H, Gray M, Woodward S, Fader M, Van den Bussche K, Van Hecke A, De Meyer D and Verhaeghe S. Interventions for preventing and treating incontinence-associated dermatitis in adults. The Cochrane Library 2016.

Gray M, Beeckman D, Bliss DZ, Fader M, Logan S, Junkin J, Selekof J, Doughty D and Kurz P. Incontinence-associated dermatitis: a comprehensive review and update. Journal of wound, ostomy, and continence nursing: official publication of The Wound, Ostomy and Continence Nurses Society / WOCN 2012; 39: 61-74.

Mugita Y, Minematsu T, Huang L, Nakagami G, Kishi C, Ichikawa Y, Nagese T, Oe M, Noguchi H, Mori T, Abe M, Sugama J and Sanada H. Histopathology of incontinence-associated skin lesions: inner tissue damage due to invasion of proteolytic enzymes and bacteria in macerated rat skin. PloS one 2015; 10: e0138117.



## **CONTACT**

University Centre for Nursing and Midwifery Skin Integrity Research Group (SKINT) | Ghent University De Pintelaan 185 | B-9000 Ghent | BELGIUM www.UCVVGent.be | SKINT@UGent.be Tel. +32 (0)9 332 83 92