Pressure Injury Prevention for Critically Ill Adults

IC Manual best practice guidelines for intensive care

ACI NSW Agency for Clinical Innovation

Patient & Carers

1	Patients, carers are to be informed of the risks, prevention strategies and management of pressure injuries. Development of the pressure injury management plan is to occur in partnership with the patient, family and carers appropriate. **NSQ Standard 8**

ASSESSMENT

2	Use a pressure injury risk assessment scale in conjunction with a comprehensive visual assessment to determine the patient's risk of pressure injury and to inform the development of a prevention plan. **Consensus**
3	The Braden scale is the recommended validated and reliable tool for assessing pressure injury risk in critically ill adults. **Grade B**

4	Inspect all of skin and mucosa attached to the patient within two hours of admission, at each repositioning and each shift change to identify indications of pressure injury including:
	• Skin
	  • For fair skin races - erythema
	  • For darker pigmented skin -persistent blue or purple hue
	• Blanching response
	• Localized heat
	• Oedema
	• Induration
	• Skin breakdown. **Grade C**

5	The skin and mucosa impacted by invasive medical devices (including but not limited naso-gastric tubes, tracheal tubes, IDUC, faecal management devices, nasopharyngeal airway and intravascular devices) should be inspected • At the beginning of each shift • Each repositioning or adjustment • Where applicable at dressing change. **Consensus IIMS**
6	Documentation of pressure injury risk assessment scale and visual inspection to occur at a minimum of once each shift. **Grade C**
7	All patients are to be regularly assessed for pain, especially in relation to repositioning and in the presence of pressure injuries. If the patient has a pressure injury this should include wound pain assessment. **Grade C**

Grading of Recommendations

A	Body of evidence can be trusted to guide practice
B	Body of evidence can be trusted to guide practice in most situations
C	Body of evidence provides some support for recommendation/s but care should be taken in its application
D	Body of evidence is weak and recommendation must be applied with caution
CONSENSUS	Expert opinion where consensus was set as a median of ≥ 7 (Likert 1-9)

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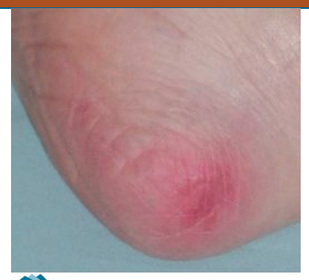
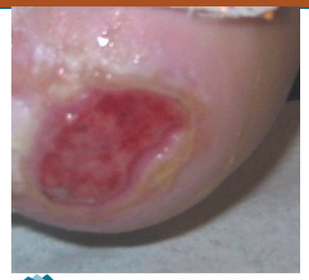
RISK FACTORS

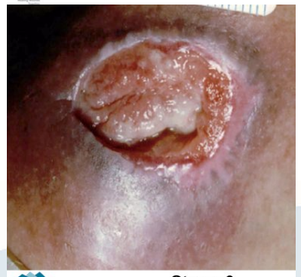
Level of risk	Risk Factor
Highly significant	• Age • Length of stay * • Heart failure • Serum albumin/ Nutrition • Incontinence • BMI <18 • Immobility/ less repositioning • Infection* • Spinal cord injury
Probably significant	• BMI >35 • Vasopressors
Possibly a risk	• Emergency admission

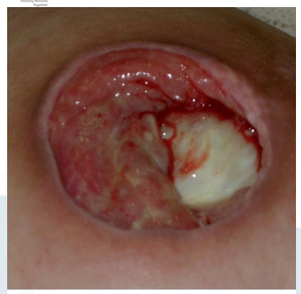
* interaction with Critical Illness

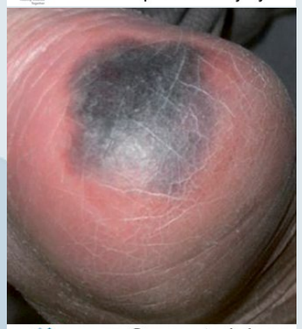
STAGING PRESSURE INJURIES

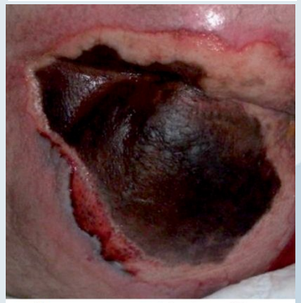

Stage 1 pressure injury


Stage 2 pressure injury


Stage 3 pressure injury


Stage 4 pressure injury


Suspected deep tissue injury


Unstageable pressure injury

SUPPORT SURFACE

8	Implement preventive strategies to protect the patient's skin as soon as possible following admission or identification of high risk. **Consensus**
9	Conduct nutritional screening and assessment using a validated screening and assessment tools appropriate to the population and clinical setting. **Grade A**
10	Ensure individual caloric requirements are met for patients at risk of pressure injury. **Grade A**
11	As a minimum, use high specification reactive (constant low pressure) support foam mattress on beds and trolleys for patients at risk of pressure injuries. No one specific high specification reactive (constant low pressure) support foam mattress is better than any other. **Grade A**
12	Those classified as high risk or very high risk of pressure injury should have a active (alternating pressure) support mattress. **Grade A**
13	Any device used to prevent heel pressure injuries should be selected and fitted appropriately to ensure pressure is adequately offloaded and hyperextension of the Achilles tendon is avoided. **Consensus**.
14	When seated in a chair or wheelchair patients at risk of pressure injury should have the appropriate reactive or active cushion. **Grade C**

REPOSITIONING

15	Unless contraindicated at risk patients should be repositioned at least every two hours even if on an active or reactive support surface. **Grade B**
16	When deciding on the frequency of repositioning and choice of patient position the clinician should consider • Risk or presence of pressure injury • Skin response • Comfort/Pain • Cognition • Ability to move • Medical condition • Support service used **Consensus**
17	Reposition patents to reduce duration and magnitude of pressure over vulnerable areas, including under medical devices, bony prominences and heels. **Grade A**
18	As a minimum, position patients using 30° lateral inclination alternating from side to side or a 30° inclined recumbent position. **Grade C**
19	Ideally patients' in seated positions should have pressure relief every 30-60.minutes. For specific patient groups (for example patients with spinal cord injuries) this may need to be more frequent. **Grade C**

The Guideline can be found at http://aci.health.nsw.gov.au/networks/intensive-care/ic-manual