Mandatory Training Workbook
Pressure Ulcer Prevention Clinical Staff

Checklist

- Read through this section of the workbook.
- If further information is required please contact the Tissue Viability Specialist Nurse on extension 1324

Background

Between 1.1% and 1.3% of patients treated in hospital and community settings in England develop pressure ulcers during their care (NHS Safety Thermometer Report September 2013). It is a quality indicator often associated with poor care.

Pressure ulcers are estimated to cost the health service £1.4 to £2.1 billion a year, equivalent to 4% of annual NHS expenditure (Bennett et al 2004). They can be painful and distressing for the patient, and their families, and patients can die from deep pressure ulcers.

Some of our patients are particularly vulnerable, older patients who are immobile, patients who have low or very high BMIs (Body Mass Index), and patients with conditions that affect blood flow, such as diabetes.

Pressure ulcers are one of four conditions targeted by the NHS 'Harm free' care programme. This programme aims to help NHS organisations build quality improvement initiatives to eliminate pressure ulcers, falls, urinary tract infections in patients with a catheter, and new venous thromboembolism.

Definition of Pressure Ulcers

''A pressure ulcer is localised injury to the skin and/or underlying tissue, usually over a bony prominence, as a result of pressure, or pressure in combination with shear. A number of contributing or confounding factors are also associated with pressure ulcers; the significance of these factors is yet to be elucidated.''
European Pressure Ulcer Advisory Panel (EPUAP) 2009

How pressure ulcers occur

Pressure ulcers develop mainly as a result of disruption to the vascular system (blood supply) – network of arteries, arterioles and capillaries; and often over a bony prominence.

Prolonged pressure may cause ischaemic changes (this is death of the tissues) at and around the point of occlusion, where the blood supply has been blocked.

The release of pressure produces a large and sudden increase in blood flow – this is a normal response called “reactive or blanching erythema.’’
If you see this, it suggests that the micro –circulation is generally intact.

However, when erythema (or redness) stays the same colour when a light finger pressure is applied, this is **non – blanching erythema**.
This indicates a degree of micro-circulation disruption.
This is assessed as a grade 1 pressure ulcer.

Pressure Ulcer Grading

Pressure ulcer grading can reflect the severity of the pressure ulcer by measuring the depth, area of skin affected, and the layers of skin damaged (NICE 2001).

Many classification systems have been adopted by trusts despite insufficient research in their use in clinical practice.

Nurses need to be able to accurately grade pressure ulcers.

EPUAP is the recognised grading tool, a national recommendation.

EPUAP Pressure Ulcer Classification System (2009)

Category/Stage 1: Non-blanchable erythema
Intact skin with non-blanchable redness of a localized area usually over a bony prominence. Darkly pigmented skin may not have visible blanching; its colour may differ from the surrounding area. The area may be painful, firm, soft, warmer or cooler as compared to adjacent tissue. Category I may be difficult to detect in individuals with dark skin tones. May indicate “at risk” persons.

Category/Stage 2: Partial thickness
Partial thickness loss of dermis presenting as a shallow open ulcer with a red pink wound bed, without slough. May also present as an intact or open/ruptured serum-filled or sero-sanginous filled blister. Presents as a shiny or dry shallow ulcer without slough or bruising*. **This category should not be used to describe skin tears, tape burns, incontinence associated dermatitis, maceration or excoriation.**

Category/Stage 3: Full thickness skin loss
Full thickness tissue loss. Subcutaneous fat may be visible but bone, tendon or muscle are *not* exposed. Some slough may be present. May include undermining and tunnelling. The depth of a grade 3 pressure ulcer varies by anatomical location. The bridge of the nose, ear, occiput and malleolus do not have (adipose) subcutaneous tissue and they can be shallow. In contrast, areas of significant adiposity can develop extremely deep pressure ulcers. Bone/tendon is not visible or directly palpable.

Category/Stage 4: Full thickness tissue loss
Full thickness tissue loss with exposed bone, tendon or muscle. Slough or eschar may be present. Often includes undermining and tunnelling. The depth of a Category/Stage IV pressure ulcer varies by anatomical location. The bridge of the nose, ear, occiput and malleolus do not have (adipose) subcutaneous tissue and these ulcers can be shallow. Category 4 ulcers can extend into muscle and/or supporting structures (e.g., fascia, tendon or joint capsule) making osteomyelitis likely to occur. Exposed bone/muscle is visible or directly palpable.

Pressure ulcer risk assessment – adapted from Waterlow

This assists in predicting patient's level of risk.
Any risk assessment tool can under or overestimate a patient's level of risk.
This should be completed regular and *used in conjunction with nurses' clinical judgment*.

Important Points to remember about grades

- Grade 1 pressure ulcers are considered reversible, so no irreparable damage has occurred – but need to ACT!!! See as early warning sign!!!
- Grade 2 pressure ulcers: Partial thickness skin loss of the dermis – can present as a shallow open ulcer with a red/pink wound bed. This category of ulcer can also present as an intact or open/burst blister, or as a shiny shallow ulcer without slough. ***This should be differentiated from skin tears, excoriation, maceration and/or moisture lesions.***
- Grade 3 pressure ulcers are full thickness skin loss. The depth of a category 3 ulcer varies by anatomical location. The bridges of the nose, ear, occiput and malleolus do not have (adipose) subcutaneous tissue so grade 3 (even 4 ulcers) can appear to be shallow. In contrast, areas of significant adiposity can develop deep category 3 ulcers (where bone or tendon not visible or directly palpable).

The differences between pressure ulcers and moisture lesions

- Wounds on the sacrum are often classified as pressure ulcers and little thought is given to whether pressure is the true cause.
- Some lesions that are attributed to moisture (incontinence or perspiration) present with a much more focused area of damage than pressure ulcers. There may be a linear wound in the natal cleft between the buttocks or on the cheeks of the buttocks, with a wound often being present on both buttocks (a copy or kissing lesion).
- It is important to identify the cause of lesions as the treatment and management of pressure ulcers and moisture lesions differ.
- A moisture lesion will not heal if treated purely by pressure reduction/relief. However, the presence of moisture may increase the risk of pressure ulceration so some pressure ulcer risk management is required.

A pressure ulcer:

- Must have pressure and/or shear present.
- Occurs over bony prominence.
- Often limited to one spot.
- Circular wounds or wounds with a regular shape.
- Superficial or deep.
- Edges are distinct.

A moisture lesion

- Moisture must be present.
- May occur over a bony prominence. However, pressure and shear should be excluded as causes, and moisture should be present. A combination of moisture and friction may cause moisture lesions in skin folds. A lesion that is limited to the anal cleft only and has a linear shape is no pressure ulcer and is likely to be a moisture lesion.
- Peri-anal redness / skin irritation is most likely to be a moisture lesion due to faeces.
- Diffuse, different superficial spots are more likely to be moisture lesions. In a kissing ulcer (copy lesion) at least one of the wounds is most likely caused by moisture (urine, faeces, transpiration or wound exudate).
- Moisture lesions are superficial (partial thickness skin loss). In cases where the moisture lesion gets infected, the depth and extent of the lesion can be enlarged/ deepened extensively.
- There is no necrosis in a moisture lesion.
- Moisture lesions often have diffuse or irregular edges.
- Redness is not uniformly distributed.

NICE 2005 Clinical Guidelines Prevention and Treatment of Pressure Ulcers

- Patients should receive an initial and ongoing risk assessment in the first episode of care (within 6 hours)
- Patients vulnerable to pressure ulcers should as a minimum be placed on a high specification foam mattress
- Patients with grade 1-2 pressure ulcers should as a minimum be placed on high spec foam mattress/cushion and be closely observed for skin changes
- Patients with grade 3-4 pressure ulcers should as a minimum be placed on high spec foam mattress with an alternating overlay or sophisticated system
- The use of the EPUAP pressure ulcer grading tool
- Pressure ulcers grade 2 and above recorded as clinical incidents
- Pressure ulcers should not be reverse graded
- Ulcer assessment supported by tracings or photography

The Trust Pressure Ulcer Prevention and Management Guideline include NICE recommendations. It is located on the Intranet, in Policies and Procedures/Clinical Policies

Repositioning

- Patients who are at risk of pressure ulcer development should be repositioned and the frequency of repositioning determined by the results of skin inspection and individual needs.

- Should take into account patient's medical condition, comfort, overall plan of care, support surface.

- Positioning of patients should ensure that prolonged pressure on bony prominences is minimised, that bony prominences are kept from direct contact with one another and friction & shear are minimised.

- Some pressure ulcer prevention strategies advocate the use of the 30 degree tilt. Patients are tilted to 30 degrees and supported in that position by pillows rather than being turned on their side. A repositioning schedule, agreed with the patient, should be recorded and established for each patient ''at risk''.

- Patients who are willing and able should be taught how to redistribute weight.

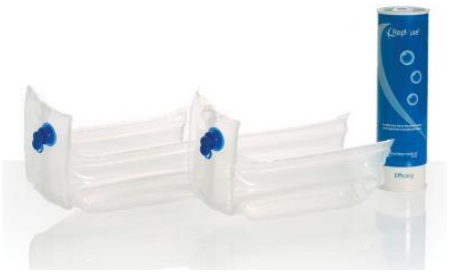
- Manual handling devices should be used correctly to minimise shear & friction, aids not left under the patient.

- Fully inflate an active mattress to provide a smooth firm surface – good for you and the patient!

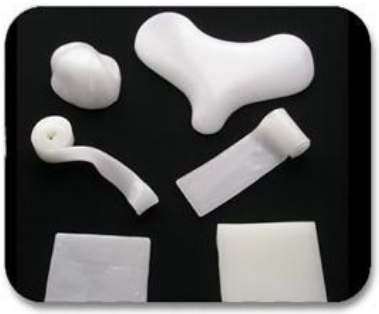
Products to use as part of pressure ulcer prevention

Pressure redistributing equipment (i.e. mattress and cushion)
24 hour provision (i.e. don't forget seating!)

Repose Foot Protectors



Aderma Dermal Pads



Dermasaver Oxygen Tubing Covers

! Remember - ***pressure ulcers are mostly preventable***

If there is a dispute about the cause or treatment of a patient with a pressure ulcer, then the **patient's records** will be important in determining whether there was a risk assessment of the patient's condition, and whether it was followed by a treatment plan which the records must show was properly implemented.

References:

European Pressure Ulcer Advisory Panel and National Pressure Ulcer Advisory Panel (2009). *Prevention and treatment of pressure ulcers: quick reference guide.* National Pressure Ulcer Advisory Panel, Washington DC. Available at: www.epuap.org.uk

NICE (2005) Pressure ulcers: The management of pressure ulcers in primary and secondary care. Clinical Guideline September 2005. NICE, London. Available at: www.nice.org.uk

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There are many useful resources available on the Intranet, in the Tissue Viability section including the PREVENT bundle for pressure ulcer prevention and the Mattress Selection Flowchart.