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PRESSURE ULCERS SIMPLIFIED



This leaflet is intended to give you information and answers to some question you may have around pressure ulcers

PRESSURE ULCERS SIMPLIFIED

Pressure ulcer development has become an indicator of the quality of nursing care. From July 2012 all NHS organisations are expected to collect data of harms, which includes pressure ulcer prevalence using the NHS Safety Thermometer (The NHS Information Centre, 2012).

Protection of the individual patient from pressure damage is a fundamental aspect of nursing care (Wounds UK, 2013) and is the responsibility of every clinician. Pressure ulcers can affect patients in every healthcare setting and are seen in all age groups.

WHAT IS A PRESSURE ULCER?

The European Pressure Ulcer Advisory Panel (EPUAP, 2014) defined pressure ulcers as a localised injury to the skin and/or the underlying tissue, usually over a bony prominence, as a result of pressure or pressure in combination with shear.'

The main causes of pressure ulceration are:

- Shear
- Friction
- Unrelieved pressure
- Reduced mobility
- Poor nutrition
- Underlying health issues
- Extremes of age
- Incontinence, both urinary and faecal (Ousey, 2011)

These intrinsic or extrinsic factors will increase a patient's risk of pressure ulcer development.

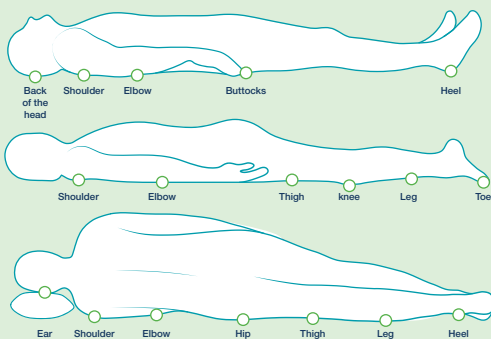
INTRINSIC	FACTORS WITHIN THE PATIENT
Malnutrition	Caused by chronic disease, major surgery, nil by mouth status and neglect
Immobility	Sedation, anaesthesia, paralysis, pain, major trauma and chronic diseases
Age	Loss of sensation
Medical condition	Congestive cardiac failure, chronic respiratory disease, diabetes, anaemia and neurological disease
Dehydration	Slows down the body's metabolism, reduces skin rigidity, more vulnerable to new wounds



EXTRINSIC	EXTERNAL FACTORS
Pressure	Compression of tissue between bone and hard surface
Shear	Shear forces initiated when part of the body tries to move but the surface remains motionless against the support surface
Friction	Friction forces occur when the shearing force increases sufficiently to overcome the body's resistance to being moved, the area of tissue in contact with the support surface will then begin to slide
Moisture	Can be caused by incontinence, sweating, high temperature and wound exudate The patients skin can adhere to the damp surface and exacerbate damage

WHERE DO PRESSURE ULCERS OCCUR?

Most pressure ulcers appear over major weight bearing parts of the body. The sacrum and heels are the most common sites of ulcer development (Wilson, 2010). This is because of the impact on the thin protection layer when forces of pressure, sheer and friction are applied during motion. Also, there is often a reduced blood supply to the extremity due to comorbidities that compromise the vascular system (eg diabetes), Wounds Essentials (2012).



DEVICE RELATED PRESSURE ULCERS

It is known that a significant proportion of pressure ulcers in critically ill or immobile patients are related to the use of medical devices (Black et al, 2010). These are not always avoidable and require techniques to help reduce or prevent skin damage beneath medical devices. Medical devices including naso-gastric tubes and ventilation masks are made of rigid material, which can cause rubbing or create pressure on the soft tissues (Jaul, 2010). Many device related pressure ulcers occur because of poor positioning or fixation of equipment, or simply failure to check the device is repositioned correctly.

Preventing device related pressure ulcers:

- Correct positioning and care of equipment with appropriate fixation and stabilisation of the device
- Use thin hydrocolloids, film dressings or barrier products underneath the device to reduce moisture friction and shear
- Use of pressure reducing dermal gel pads (Fletcher, 2012)

PRESSURE RELIEF EQUIPMENT

Pressure ulcers will not be able to heal if they continue to be subjected to the forces that caused them. The equipment works by redistributing the pressure over a greater area of the body, so that the individual point supports less pressure.

REPOSITIONING

Involves moving patients into different positions, in order to remove or redistribute pressure from a particular part of the body.

SKIN CARE

Skincare is crucial to prevent any further breakdown of the skin, in addition to improving its tolerance. The skin should be inspected and cleansed regularly. When cleansing, a PH neutral agent should be used. After washing, the skin should be patted dry and emollient used to rehydrate any dry skin. Moisturising the skin to reduce dryness may help to reduce the risk of breakdown and enhance skin health (Stephen-Haynes 2011). Prevention of skin breakdown is paramount. Barrier creams can be effective and used to prevent breakdown of intact skin and protect vulnerable skin.

NUTRITION

Good nutrition is essential in the management of pressure ulcers. Adequate nutritional intake is essential to wound healing. Patients may need a greater proportion of protein in their diet, to help ensure a positive nitrogen balance and replace any lost protein through their ulcers. A patient's nutritional status should be assessed.

WOUND CARE

Wound care must be optimised and follow the basic principles of wound care:

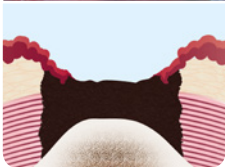
- Debride necrotic or sloughy tissue and clean the wound to remove any debris
- Provide a moist wound healing environment through the use of appropriate dressings
- Maintain an optimal bacterial balance
- Protect the wound from further injury

PATIENT EDUCATION

The role of education is to gain the best outcome for the patient. This is achieved through the effective teaching of the patient and family about the principles of pressure ulcer management.

GRADE 4

- Full thickness tissue loss with exposed bone, tendon or muscle
- Slough or eschar may be present
- Often includes undermining and tunnelling
- Depth varies depending on thickness of subcutaneous tissue
- Can cause osteomyelitis or osteitis

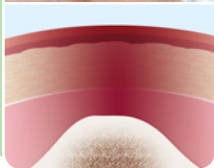
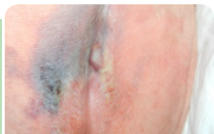


UNSTAGEABLE

- Full thickness tissue loss with exposed bone, tendon or muscle
- Slough or eschar may be present
- Often includes undermining and tunnelling.
- Depth varies depending on thickness of subcutaneous tissue
- Can cause osteomyelitis or osteitis

DEEP TISSUE INJURY

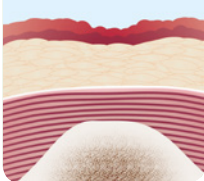
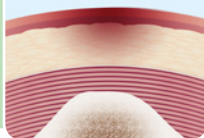
- Purple or maroon area of discoloration
- Intact skin or blood filled blister
- Tissue may be painful, firm, mushy, boggy, warmer or cooler as compared to adjacent tissue



EPUAP (EUROPEAN PRESSURE ULCER ADVISORY PANEL) PRESSURE ULCER CLASSIFICATION 2014

GRADE 1

- Intact skin with non-blanching redness of the localised area usually over a bony prominence
- The area may be painful, firm, soft, warmer or cooler as compared to adjacent tissue
- May indicate patient at risk

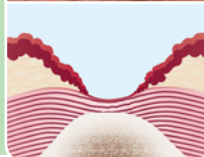


GRADE 2

- Partial thickness loss of dermis presenting as a shallow open ulcer with a pink wound bed without slough
- May also present as an intact or ruptured serum filled blister
- Shiny or dry shallow ulcer without sloughing or bruising
- Not to be confused with skin tears, tape burns, moisture lesions
- Bruising indicates deep tissue injury

GRADE 3

- Subcutaneous fat may be visible, but bone, tendon or muscle are not exposed
- Slough may be present but does not obscure the depth of tissue loss.
- May include undermining or tunnelling
- Depth varies depending on subcutaneous tissue



CONCLUSION

Pressure ulcers are a serious health problem. Prevention and early intervention are critical for effective management. Successful prevention is key but requires a comprehensive approach.

Mobilisation if able to is an important component in the management of pressure ulcers, as being immobile can have significant consequences. Encourage and assist the patient to move or shift into a new position. Mobilisation will help to reduce the duration and magnitude over vulnerable areas of the body.

Management and treatment of pressure ulcers

The management and treatment of pressure ulcers involves ensuring that all the contributory causes have been addressed. The main aims of pressure ulcer management are:

- Reduce shear and motion using a suitable support surface
- Manage the skin's microclimate
- Create an optimal wound healing environment
- Improve patient comfort

References:

European Pressure Ulcer Advisory Panel (2014) *Prevention and treatment of pressure ulcers: quick reference guide*. Washington DC, United States of America: National Pressure Ulcer Advisory Panel. Moore,Z. Thorpe,E. (2015) *Dressing for pressure ulcer prevention made easy*. London:Wounds UK. Available from www.wounds-uk.com. NHS Information Centre(2012) Available at:<http://ic.nhs.uk/services/nhs-safety-ther-mometer>. Ousey,K. (2011) *Pressure Ulcers: How to identify different categories*. *Wound Essentials*. Vol 6 pg8-12. Wilson,M. (2010) *A brief guide to pressure ulcer assessment*. *Wound Essentials*. Vol 5. P 12-20. *Wound essentials (2012) Pressure ulcer management how to guide*. Vol 7 Issue 1 June. Black, J., Cuddington, J., Walko, M., Didier, L.A., Lander, M.J. and Kelpie, M.R. (2010) *Medical Device Related Pressure Ulcers in Hospitalized Patients*. *International Wound Journal*. 7 (5) 358-65. Stephen-Haynes, J. (2011) *Skin Damage: Management in the Older Person*. *Wound Essentials*. 6. 40-43. Jaul, F. (2011) *A Prospective Pilot Study of Atypical Pressure Ulcer Presentation in a Skilled Geriatric Nursing Unit Ostomy Wound Management*.57 (2) 49-54. Fletcher, J. (2012) *Device Related Pressure Ulcer. Made Easy Wounds UK*. HYPERLINK "<http://www.wounds-uk.com>" www.wounds-uk.com.