# Pressure Sores. -Types & Causes

Pressure ulcers, also commonly referred to as pressure sores, are lesions caused by unrelieved pressure that results in damage to the underlying tissue. Generally, these are the result of soft tissue compression between a bony prominence and an external surface for a prolonged period of time. Bony prominences where pressure ulcers most commonly occur include heal of the foot, elbow and hip joint.

# **Clinical Manifestations & Diagnosis**

Pressure ulcers are usually easy to identify by their appearance and location overlying a bony prominence. Pressure ulcers should not me mixed up with the following ulcers:

- **Diabetic neuropathic ulcers** are seen in patients with diabetes who have peripheral neuropathy. Peripheral neuropathy is nerve damage which causes a lack of sensation in a diabetic's foot. Diabetic ulcer characteristically occurs on the foot, usually on the ball of the foot just behind big toes or on the top of toes. (more information on diabetes is available in Whelehans or at www.whelehans.ie)
- Venous insufficiency ulcers are usually found on the inner part of the lower leg usually just above the ankle. Approximately 70 per cent of all leg ulcers are venous ulcers. They can occur either on one or both legs and each leg may have more than one ulcer. They can range from painless to extremely painful. These types of ulcers are common in people who have a history of leg and feet swelling. The ulcer usually is an open sore with red to brown discoloration. The area will also be swollen.
- Arterial ulcers occur as the result of arterial occlusive disease. Approximately 10 per cent of all leg ulcers are arterial ulcers. Feet and legs often feel cold and may have a whitish or bluish, shiny appearance. Arterial leg ulcers can be painful. Pain often increases when your legs are at rest and elevated.

# Classification system

European Pressure Ulcer Advisory Panel grading system grades ulcers from grade 1 (mild) to grade 4 (severe)

- Grade 1: redness that does not whiten on touch. Discolouration of the skin, warmth, swelling and hardness may be indicators.
- Grade 2: partial thickness skin loss. The ulcer is superficial and presents clinically as an abrasion or blister. Surrounding skin may be red or purple.
- Grade 3: full thickness skin loss involving damage to or necrosis of underlying tissue such as muscle.
- Grade 4: extensive destruction, tissue necrosis, or damage to muscle, bone, or supporting structures with or without full thickness skin loss.



# **Causes**

### **External Causes**

The four main external factors that lead to the development of pressure ulcers are **pressure**, **shearing forces**, **friction**, and **moisture**.

- **Pressure-** Pressures are greatest over bony prominences where weight-bearing points come in contact with external surfaces (e.g.) mattress when a person is lying in bed
- Shearing forces- Shearing forces occur when patients are placed on an incline.
- **Friction-** Friction occurs when patients are dragged across an external surface. For example, extreme care must be taken when helping an immobile person out of the bed to ensure they are not pulled out of the bed (even if this is done gently)
- **Moisture** Exposure to moisture in the form of perspiration, feces, or urine may lead to ulcers.

# Patient specific causes

- **Immobility** Immobility is the most important patient factor that contributes to pressure ulcer development.
- **Incontinence** Urinary incontinence is frequently cited as a predisposing factor for pressure ulcers. Some studies suggest that incontinent patients have up to a five-fold higher risk for pressure ulcer development.
- Nutritional status- body mass index below 25 kg/m<sup>2</sup> in elderly people is associated with greater risk of pressure ulcer development. Ask in Whelehans if you would like your own or a loved one's BMI calculated.
- Circulatory factors- Factors which can exacerbate or cause circulation issues include low blood pressure, dehydration, vasoconstriction secondary to shock, heart failure, or medications.
- Neurological diseases- Neurological diseases such as dementia, delirium, spinal cord
  injury, and neuropathy are important contributors to pressure ulcer development. This
  may be related to immobility, spasticity, and muscle contractions that are common in
  these conditions. Sensory loss is also common, suggesting that patients may not
  perceive pain or discomfort arising from prolonged pressure.

# Care of the Elderly

To help elderly patients and their families we blister pack medication for free. This can be a great aid in situations where patients need to take multiple long term medicines, especially in situations where a person lives alone or where home help has been cut by the HSE. Blister packs arrange the medication into easy to follow packs arranged into the different times of day. Whelehans also have a free prescription delivery service covering Westmeath where we will collect your prescription from your GP and deliver it to your home. This is proving especially popular with families and carers since the HSE are implementing cutbacks to home help for elderly patients.

Disclaimer: Please ensure you consult with your healthcare professional before making any changes recommended

For comprehensive and free health advice and information call in to Whelehans, log on to www.whelehans.ie or dial 04493 34591. You can also e-mail queries to info@whelehans.ie.

