Pressure sores

Summary

- Anyone confined to a bed or chair for a long time is at risk of developing a pressure sore.
- Pressure sores can be difficult to treat.
- Prevention includes regular changes of position, good hygiene and skin care, and a healthy diet.

Pressure sores (more recently called pressure injuries) are areas of damage to the skin and underlying tissue caused by constant pressure or friction. This type of skin damage can develop quickly in anyone with reduced mobility, such as older people or those confined to a bed or chair.

Pressure injuries can be difficult to treat and can lead to serious complications. Prevention includes regular position changes, good hygiene and skin care, and a healthy diet.

Other names for this type of damage include bed sores, pressure ulcers and decubitus ('lying down') ulcers.

The skin over bony areas such as the heels, elbows, the back of the head and the tailbone (coccyx) is particularly at risk. Lack of adequate blood flow can cause the affected tissue to die if left untreated.

Grades of pressure sores

If a person is bedridden for long enough, the areas of skin that are constantly in contact with the mattress or chair will start to discolor. This shows that the skin is in danger of ulcerating.

Pressure sores are graded to four levels, including:

- grade I – skin discoloration, usually red, blue, purple or black
- grade II – some skin loss or damage involving the top-most skin layers
- grade III – necrosis (death) or damage to the skin patch, limited to the skin layers
- grade IV – necrosis (death) or damage to the skin patch and underlying structures, such as tendon, joint or bone.

Complications of pressure sores

Untreated pressure sores can lead to a wide variety of secondary conditions, including:

- sepsis (bacteria entering the bloodstream)
- cellulitis (inflammation of body tissue, causing swelling and redness)
- bone and joint infections
- abscess (a collection of pus)
- cancer (squamous cell carcinoma).

Risk factors for pressure sores

A pressure sore is caused by constant pressure applied to the skin over a period of time. The skin of older people tends to be thinner and more delicate, which means an older person has an increased risk of developing a pressure sore during a prolonged stay in bed.

Other risk factors for pressure sores include:

- immobility and paralysis – for example due to a stroke or a severe head injury
• being restricted to either sitting or lying down
• impaired sensation or impaired ability to respond to pain or discomfort – for example, people with diabetes who experience nerve damage are at increased risk of pressure sores
• urinary and faecal incontinence – skin exposed to urine or faeces is more susceptible to irritation and damage
• malnutrition – can lead to skin thinning and poor blood supply, meaning that skin is more fragile
• obesity – being overweight in combination with, for example, immobility or being restricted to sitting or lying down, can place extra pressure on capillaries, reducing blood flow to the skin
• circulation disorders – lead to reduced blood flow to the skin in some areas and can lead to pressure sores
• smoking – reduces blood flow to the skin and, in combination with reduced mobility, can lead to pressure sores. Healing of pressure sores is also a slower process for people who smoke.

People who use a wheelchair are most likely to develop a pressure sore on the parts of the body where they rest against the chair. These may include the tailbone or buttocks, shoulder blades, spine and the backs of arms or legs.

When a person is bedridden, pressure sores can occur in a number of areas, including:
• back or sides of the head
• rims of the ears
• shoulders or shoulder blades
• hipbones
• lower back or tailbone
• backs or sides of the knees
• heels, ankles and toes.

Prevention of pressure sores

If you are caring for someone confined to a bed or chair for any period of time, it's important to be aware of the risk of pressure sores. To prevent skin damage, you need to relieve the pressure, reduce the time that pressure is applied and improve skin quality.

Develop a plan that the person in your care and any other caregivers can follow. This plan will include position changes, supportive devices, daily skin care, a nutritious diet and lifestyle changes.

A routine nursing assessment is required for people at high risk of pressure sores.

Position changes to prevent pressure sores

People who use a wheelchair are advised to shift position within their chair about every 15 minutes. People who spend most of their time in bed are advised to change position at least once every two hours, even during the night, and to avoid lying directly on their hipbones.

Pillows may be used as soft buffers between the skin and the bed or chair.

Daily skin care to prevent pressure sores

Strategies for preventing pressure injuries include:
• Check the skin at least daily for redness or signs of discolouration.
• Keep the skin at the right moisture level, as damage is more likely to occur if skin is either too dry or too moist.
• Use moisturising products to keep skin supple and prevent dryness.
• Never massage bony areas because the skin is too delicate.

Diet and lifestyle changes to avoid pressure sores

Strategies include:

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• Make sure the person eats a healthy and nutritious diet.
• Be aware of using good hygiene practices.
• Maintain activity levels, where appropriate.
• Make sure the person quits smoking.

**Warning signs of pressure sores**

Daily checks are needed to look for early warning signs including:

- Red, purple or blue torn or swollen skin, especially over bony areas
- Signs of infection, such as skin warmth, swelling, cracks, calluses, and wrinkles.

**Treatment for pressure sores**

There is a variety of treatments available to manage pressure sores and promote healing, depending on the severity of the pressure sore. These include:

- Regular position changes
- Special mattresses and beds that reduce pressure
- Dressings to keep the sore moist and the surrounding skin dry
- Light packing of any empty skin spaces with dressings to help prevent infection
- Regular cleaning with appropriate solutions, depending on what stage the sore is at
- Specific drugs and chemicals applied to the area, if an infection persists
- Surgery to remove the damaged tissue
- Operations to close the wound, using skin grafts if necessary
- Continuing supportive lifestyle habits such as eating a healthy and nutritious diet.

**Where to get help**

- Your doctor
- Hospital staff
- Domiciliary care staff
- NURSE-ON-CALL Tel. 1300 60 60 24 – for expert health information and advice (24 hours, 7 days)

**Things to remember**

- Anyone confined to a bed or chair for a long time is at risk of developing a pressure sore.
- Pressure sores can be difficult to treat.
- Prevention includes regular changes of position, good hygiene and skin care, and a healthy diet.