

# Wound Therapy & Skin Breakdown

### Types of skin breakdown:

<u>Friction</u>- occurs when the skin moves against a firm or rough surface including bed linens, wheelchair parts, a crutch or brace, or tubing from a catheter or oxygen. Friction also occurs when parts of the body rub together for example, ankles or knees rubbing against each other. The rubbing action may cause skin abrasions that can lead to deeper tissue injury.

<u>Shearing</u>- occurs when the skin moves in one direction while the structures under the skin such as the bones remain fixed or move in the opposite direction. This can happen when clients are dragged rather than lifted up in bed, when positions are changed, or when residents slide down in bed or in a wheelchair. Blood vessels become twisted and stretched causing the tissues being served to lose essential oxygen and nutrients which then leads to breakdown.

<u>Skin Tears</u>- shearing that cause actual tears in fragile skin. These skin tears are painful and act as a portal of entry for infectious pathogens, and commonly lead to further breakdown.

\*When pressure is put on tissues for a long time, skin breakdown can occur. The tissues are usually trapped between a bony prominence such as the heel, hip bone, or buttocks and the collapse of tiny blood vessels. Skin surfaces receiving less nourishment through the damage vessels quickly break down.\*

<u>Pressure ulcers</u>- skin breakdown that progresses to the formation of deep, painful lesions also known as decubiti.

### Factors leading to skin breakdown:

- Impaired circulation due to pressure
- Prolonged contact with moisture
- Prolonged contact with excretions/secretions
- Poor nutrition and debilitation
- Dehydration
- Shearing forces and friction
- Immobility
- Incontinence

\*Unless action is taken the damage from these factors is progressive\*

## Staging of tissue breakdown:

<u>Stage one</u>- the intact skin surface shows redness or blue-gray discoloration over a pressure point which does not disappear when the pressure is removed.

<u>Stage two</u>- the reddened skin is accompanied by an abrasion, blister or a shallow like crater. The area around the site is reddened.

<u>Stage three</u>- the deeper tissues of the skin breakdown and a deep crater is formed

**<u>Stage four-</u>** the deeper tissues of muscles and bones are involved. At this stage clients experience fluid loss and pain and are at great risk for infection.

# **Preventing Skin Breakdown:**

- ✓ Observe the clients skin during cares and bath time and report to RP & QP
- ✓ Handle the skin gently and use a mild cleansing agent. Avoid hot water and do not scrub the skin. Dry thoroughly by patting the skin with a towel.
- ✓ Remove feces, urine or moisture of any kind as soon as possible from the client's skin. Prolonged contact is irritating to the skin.
- ✓ Use lotion on dry skin areas but do not use on broken skin. Pat lotion on skin gently- do not rub vigorously.

- ✓ Encourage good nutrition and adequate fluid intake.
- ✓ Offer change of positioning every 2 hours to reduce pressure in any one area. Some clients may need repositioning more often than others.
- ✓ Keep bed linens and clothing wrinkle free.
- ✓ Encourage clients sitting in wheelchairs to raise themselves or change position to relieve pressure every 15 minutes.
- ✓ Observe for improperly fitted or worn shoes, orthopedic braces, and support stockings that may rub the skin.
- ✓ Monitor oxygen tubing and urinary catheter tubings to be sure they are positioned so that they do not irritate the skin.
- ✓ When repositioning, separate body areas likely to rub together, especially over bony prominences by using pillows.
- ✓ For clients sitting in wheelchairs for long periods of their day, foam, gel or air cushions are used to reduce pressure on the buttocks area.
- ✓ For clients who are bed bound for long periods of the day, relieve pressure on heels by supporting feet off the bed using pillows. Sometimes sheepskin pads and special pressure reducing mattresses or alternating pressure mattresses are used in bed.
- ✓ Report signs of infection, such as fever, odor, drainage, inflammation, or bleeding to the RP and QP.

#### Actions taken when skin breakdown occurs:

- ✓ Often a healing treatment plan with daily procedures will be implemented under the direction of the RP and often a RN wound care nurse. PCA may assist with these plans under the direction/teaching and supervision of the RP and QP, and sometimes accompanied wound nurse clinic visits by the PCA with the client.
- ✓ Sometimes skin breakdown areas may be covered with a dry sterile dressing held in place by paper tape or other hypoallergenic tape so as not to cause any further skin damage when removing the tape.
- ✓ Clients may be placed on alternating pressure mattresses or pressure reducing mattresses or beds.

- ✓ At times open lesions are packed loosely with gauze soaked in a wound gel. This gel keeps the lesions moist, breaks down dead cells, and promotes healing.
- ✓ At times an open area may be protected and kept moist by using special dressings. They have a clear plastic covering that permits air to reach the tissues as well as keeping them moist to promote healing. The dressing must extend beyond the wound edge and is held in place with a frame of either paper or silk tape. Most of these dressing must be changed every 3-5 days unless there is leakage or according to the established treatment plan.
- ✓ Clients are encouraged to participate to whatever extent is possible in their own care. Attentive PCA care is essential in preventing skin break down. It is far easier to prevent pressure ulcers than to heal them.