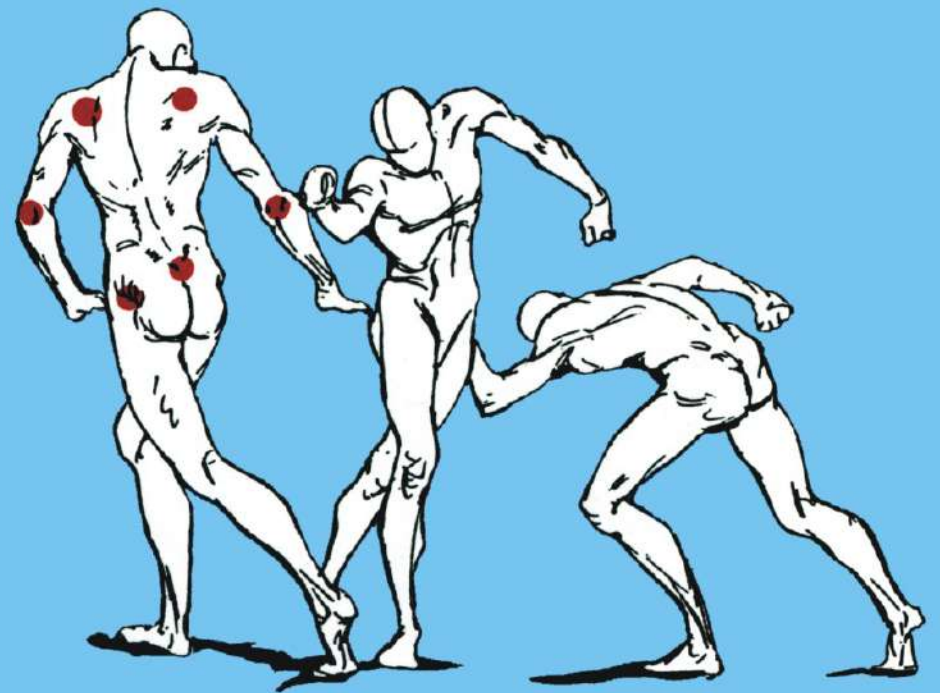


HOW TO PREVENT PRESSURE ULCER (PRESSURE SORE)

BUDDHIST DALIN TZU CHI GENERAL HOSPITAL



Contents

Preface	1
1. Functions of the skin.....	2
2. Causes and symptoms of pressure sore.....	3
3. Locations vulnerable to pressure sore.....	4
4. Precautions against pressure sore	6
5. Conclusion	16

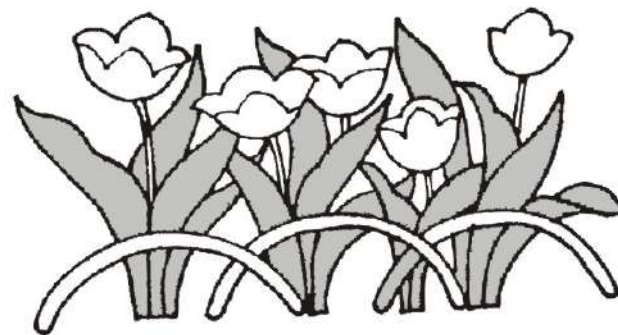


Preface

Ladies and Gentlemen :

When you were hospitalized, did you ever wonder why nurses kept reminding you to turn your body and check your skin, or did you ever feel disturbed by the nurse who helped to turn your body while you were sleeping? In fact, these exhortations and the disturbances were very important to you because they could prevent pressure sores from happening.

This brochure will tell you how to maintain a healthy skin such that pressure sores would not develop.



1. Functions of the skin

- (1). Skin is a tenacious layer that covers the whole body. It has the function of protecting your body from harms such as filth, bacteria, and physical damage.
- (2). Skin has specific nerves that are sensitive to all kinds of stimuli such as touch, heat, and pain. As soon as the nerves receive these sensations, they transmit signals to the brain to let it decipher the feeling of coldness, heat, pain or comfort.
- (3). Skin is able to adjust body water balance and body temperature. Hair on the skin can act as a buffer zone to protect the body and keep the Body warm.

2. Causes and symptoms of pressure sore

Pressure sore means the necrosis, as a result of poor blood circulation and dearth of nutrition, of skin cells as well as the soft tissue under the skin. The necrosis is usually caused by long-term pressure on skin.

Causes of pressure sore include:

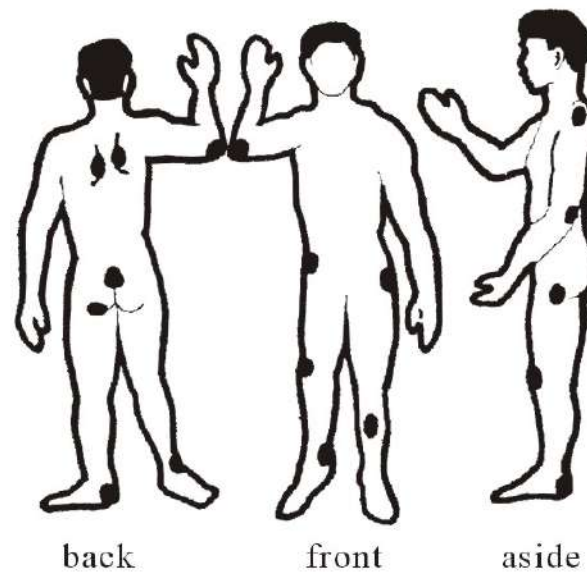
- (1). Compression.
- (2). Damped environment such as wet bed sheet stained with soil and urine.
- (3). Friction such as uneven bed sheet or hard subjects, for example, Foley.
- (4). Dearth of nutrition.
- (5). Patients' inability to turn their body by themselves. Usually, these patients also have reduced sensation of their body. Therefore, they are prone to pressure Sores if their bodies are not turned regularly.
- (6). Specific diseases such as diabetes.

Symptoms:

- (1). Local reddened skin, stinging sensation, and lack of resilience of skin.
- (2). Gradual change of skin color to purple.
- (3). Grazed skin.
- (4). Ulcer, pain and discharge.

3. Locations vulnerable to pressure sore

The most vulnerable locations to pressure sore are bony protrusions. Bones are very close to skin because fewer liner tissues are there at bony protrusions. In addition, bony protrusions are major contact points of human body, at which significant pressure change may occur. Therefore, bony protrusions are prone to pressure sore. The following diagram shows the major bone protrusions over the human body.



The main pressure points when lying face up are back of head, shoulder blades, elbows, tail bone, and heels.

The main pressure points when lying sideways are ears, outside of shoulders, hips, outer sides of knees, and ankles.

The main pressure points when lying face down are toes, knees, fronts of shoulders, and breasts.



4. Prevention of pressure sore

Prevention is more important than treatment for pressure sores. With proper preventive measures, one can avoid harm to body and mind, time and money can be saved as well.

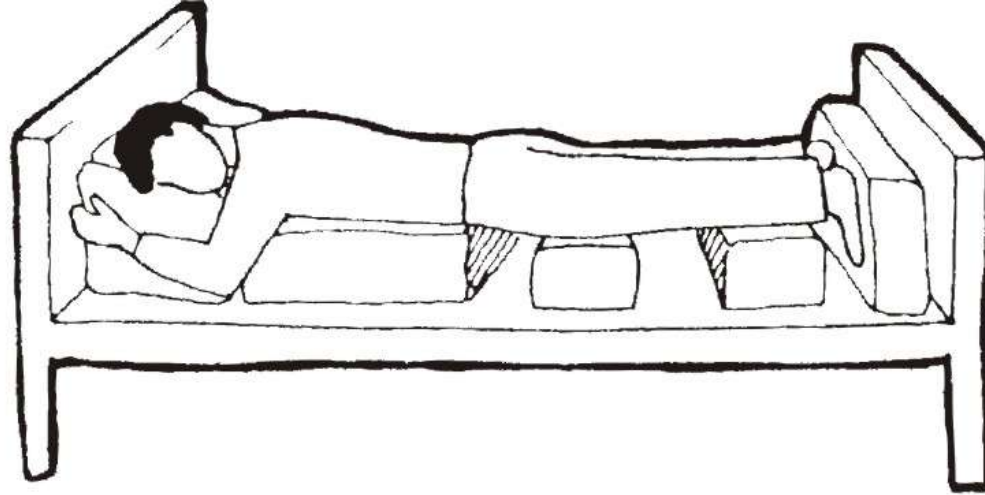
Three important ways of prevention:

(1). Avoid the persistence of pressure

Pay special attention to the pressure at bony protrusions. Use pillow or sponge to help disperse pressure for all sleeping positions. Most importantly, change position at least every two hours. Below are the proper ways of tucking in three common sleeping positions:

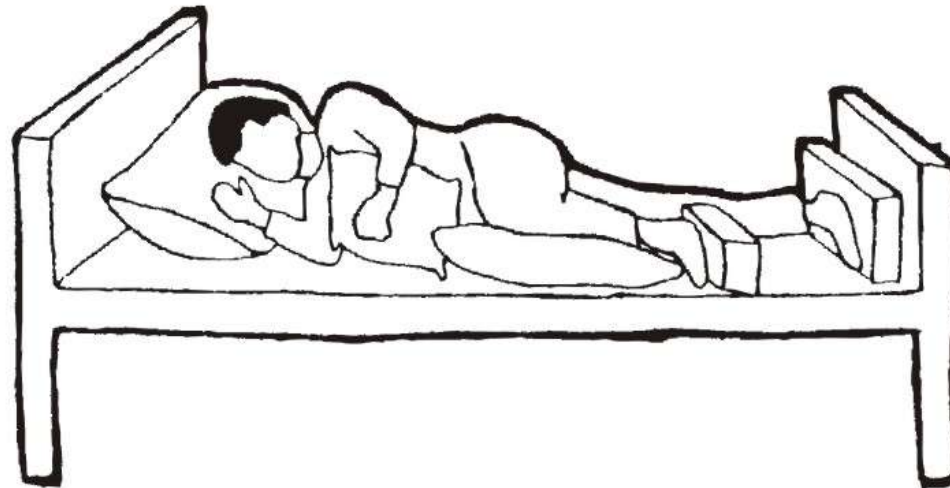
A. Lying face down:

Put pillows under the chest, thighs, and shanks to alleviate the pressure on shoulders, knees and hips, see the diagram for illustration. Make sure that toes should be suspended in the air such that they are not touching the bed to create extra pressure.

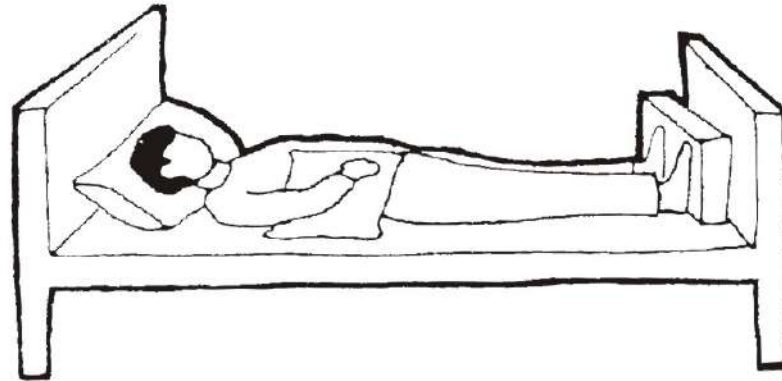


B. Lying sideways:

Place a big pillow against the back. In addition, put smaller pillows under the upper limb, the bent leg, and the ankle.



- C. Lying face up: Put pillows only under the head and the upper limb. No more extra pillows are needed for other parts of the body.



Besides maintaining a good sleeping position, also make sure that no hard subjects (such as Foley catheter) are placed under the body. In addition, be sure to smooth out the bed sheet or the skin will be grazed by uneven sheet.

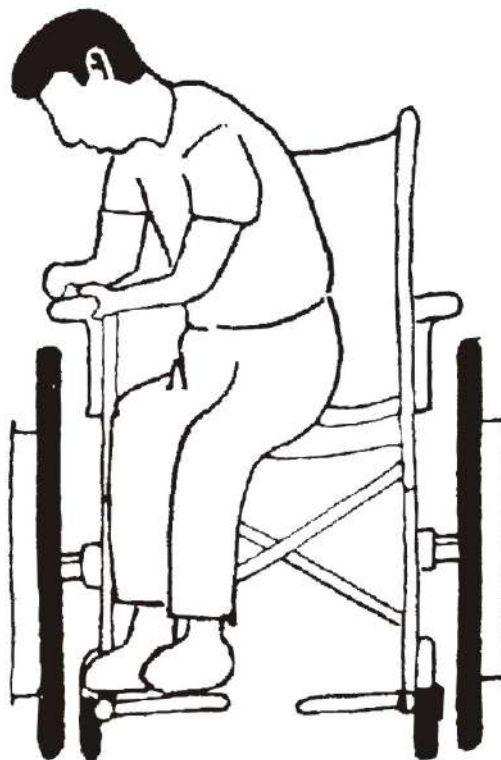
If you are sitting, for instance on a wheelchair, do the following exercises to release pressure. These exercises should be done every 15 minutes, each time 10 to 20 seconds. Patients may need other's assistance for the first few trials but should be able to exercise themselves once they are experienced.

A. Backward leaning: Ask others to help you tilt your wheelchair backward.



B. Sideways leaning:

Brake the wheelchair first and then move your body to one side of the wheelchair in order to release the pressure on the other side of your body. Repeat the above steps and change sides.



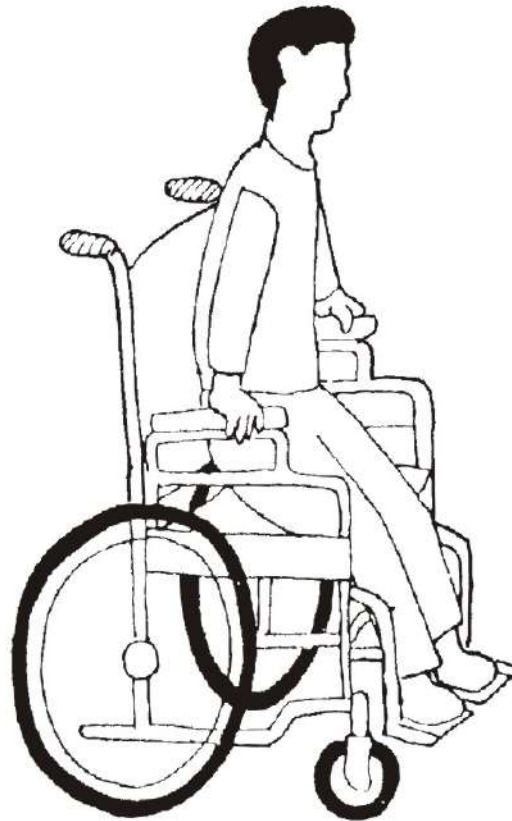
C. Forward leaning:

Brake the wheelchair first. Put your feet on the ground and lean your body forward such that your chest is as close to your knees as possible and then sit upright.



D. Push-ups:

Brake the wheelchair first. Press both hands firmly against the armrests to push your body up until your hips are off the chair. Several practices need to be done to train your arms. Otherwise, your arms may not be powerful enough to do this exercise.



(2).Maintain the health of skin

It is easy to keep your skin healthy when you are not sick or injured. If your abilities to freely move and to feel are compromised, your skin may be easily damaged. The following methods are suggested to maintain the health of your skin:

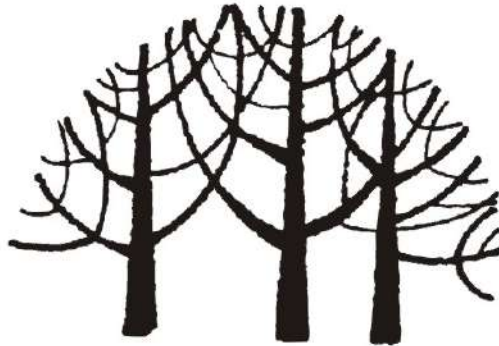
- A. Use soap and clean water to rinse your whole body and then wipe your body dry. Locations at body folds such as armpits and groins should be washed everyday to keep them clean.
- B. If you notice red spots or hives, go to the hospital and let your doctor handle it.
- C. Use lubricants or lotions to moisturize the dry skin, but not on the grazed skin.
- D. Aged skin tends to be thickened, especially at hands and feet. You can soak your skin and rub it with a towel to remove the debris. Massage the aged skin with lotion can also help to soften the aged tissues.
- E. Long nails and toenails should be trimmed so that they will not become ingrown and cause infection. You can soak the nails and gently brush off any debris under the nails.

F. Exercising and massaging can enhance local blood circulation. Usually, the back, limbs, and bony protrusions should be massaged. Doing so not only enhances blood circulation to nurture cells but also relaxes muscles to make you fall asleep more easily.

(3). Provide good nutrition

Proteins and vitamins are essential ingredients for tissue recovery. Without these, tissues become incapable of resisting pressure. Therefore, providing sufficient nutrition to the skin will enhance its ability to resist pressure and minimize the chances of blood deficiency. Consequently, the development of pressure sore can be avoided. Note particularly that grazed skin needs more protein than normal skin does.

In addition to the above, you need to watch closely the conditions of your skin. This is one of the ways to prevent pressure sore. How does one self-examine one's skin? You can do it while taking a bath or changing clothes. Look for reddened or grazed skin. Pay special attention to bony protrusions of your body. For the locations that you can not see directly by yourself, for example, back and hips, you can use a mirror or ask your family to help you check it.



5. Conclusion

The importance of reducing local pressure to the body tends to be overlooked. Pressure often occurs due to lack of attendance of skin and inadequate turning of the body. Careless attendance of these physical conditions ultimately leads to pressure sore. Once pressure sore is developed, it could be costly and time-consuming to treat it. However, preventing pressure sore from happening is very easy. With this brochure, we intend to remind you to pay attention to the health of your skin, and let you know the simple strategies to reduce local pressure to the body.

For more information or face to face instructions, please call during the day to Health Consultation Room, Buddhist DaLin Tzu Chi General Hospital at **(05) 264-8333**, or call **(05) 264-8000** Extension **5405**.