A guide to healing pressure ulcers

In an ideal world, anyone at risk of developing a pressure ulcer would be using a dynamic support surface or other appropriate prevention tool, however the speed with which pressure ulcers can form often catch unsuspecting patients and/or caregivers unawares.

Do not feel guilty or incompetent should your loved one develop a pressure ulcer as this can happen in spite of your best efforts. Other complicating factors contribute that are often well beyond any caregivers control such as advanced age, incontinence, poor nutritional status including dehydration and certain medical conditions such as neuromuscular disorders, diabetes and cardiovasular disease.

Pressure ulcers can be healed but it is a challenging process that may require a team of individuals working together including patients, caregivers and medical staff. Useful information about the patients' general health should always be provided to your doctor or nurse, including conditions that could slow healing (such as diabetes); a list of current prescription and over-the-counter medicines; and who is available to help carry out the treatment plan if residing at home.

Treatment of pressure ulcers focuses on many of the same activities done to prevent them; for example, reducing or eliminating pressure from the sore, and eating a nutritious diet that includes adequate calories, protein, vitamins and minerals in order to promote healing. Specific care for the ulcer includes cleaning the sore and removing dead tissue, and applying a dressing or bandage to protect the area while it heals. Your health care provider should be consulted for specific instructions on diet, relieving pressure and changing positions safely, and for cleaning and dressing the ulcer.

tips for caregivers

Keep in mind that pressure ulcers can be deadly serious, depending on how much skin and tissues have been damaged. You should always contact your doctor if you suspect a pressure ulcer is forming, to ensure the severity of the condition is assessed and appropriate treatment prescribed. Ideally this will include the use of a pressure reducing support surface such as an alternating mattress.

The tips below are not meant to replace medical advice, merely offer some guidance to caregivers when dealing with pressure ulcers outside of an institutional environment.

- While waiting for clinical assessment and/or an appropriate pressure reducing support surface, initiate an aggressive turning and pressure relief schedule doing everything possible to relieve the pressure that caused the sore, avoiding further trauma or friction. Powdering the sheets lightly can help decrease friction in bed.
- Prevent build up of skin moisture where pressure exists in attempt to prevent further skin breakdown of early Stage I ulcers.
- Institute all possible measures to improve nutrition, hydration and other conditions to help the ulcer heal.
- In general, do not use strong antiseptic agents for cleaning wounds, such as a Betadine, Dakins Solution, Hydrogen Peroxide, Acetic Acid and others. Older patients may heal slowly and these agents slow the healing process even further.
- Use skin barriers and other barrier ointments/lotions around the ulcer to help maintain it intact and prevent further breakdown as well as a barrier to irritating adhesive created by some dressing applications.
- Clean the sore and keep free of dead tissue by rinsing the area with a salt-water solution or a special prescribed solution with every dressing change. The solution removes extra fluid and loose material. Your doctor or nurse will show you how to properly clean the pressure sore.
- Sometimes doctors will suggest a method to remove dead tissue such as applying wet gauze bandages on the sore and allowing them to dry with frequent changes. The dead tissue sticks to the gauze and is removed when the gauze is pulled off. Other times he may order special dressings that are left in place for days to assist with debridement or surgical debridement may be necessary.

- Maintaining a moist environment is critical at Stage II and more advanced stages. After cleansing, if moderate to heavy draining wound an alginate, hydrocolloid, foams or hydrofibers may be prescribed with waterproof dressing cover or cover with gauze.
- If the wound is dry, hydrating the wound bed with a hydrogel may be ordered with a secondary dressing to cover and keep the gel in wound bed. Frequency of dressing changes will depend on type of dressing prescribed and amount of drainage.
- Since removing dead tissue and cleaning the sore can be painful, ask your doctor to suggest a pain reliever to be taken 30 to 60 minutes before dressing changes.
- Deep ulcers can go down into the muscle or even to the bone and if not treated properly can become infected. An infection in a pressure sore can be serious and spread to rest of the body requiring immediate medical attention. Medical consultation for the appropriate treatment is required.
- Treatment for an infected sore depends on how extensive the infection is. If only the sore is infected, an antibiotic ointment may be prescribed to apply to the sore. When bone or deeper tissue is infected, IV antibiotics are often required.
- Controlling infection is crucial.
  Report any of the followings signs related to the ulcer:
  – thick yellow or green pus
  ¬ foul smell from the sore
  – redness and swelling around the sore
  – tenderness and warmth around the sore
- Report signs that the infection may have spread (systemic infection) including:
  – fever or chills
  – mental confusion
  – rapid heartbeat
  – weakness

As a pressure sore heals, it slowly gets smaller and has less drainage. New, healthy tissue starts growing initially at the bottom or base of the sore. This new tissue is light red or pink and looks lumpy and shiny.

Remember persistence pays off when it comes to healing pressure sores. It may take two to four weeks or more of treatment or longer before you see these signs of healing. Do not get discouraged and take one day at a time.

About	Stage I	Stage II	Stage III	Stage IV
General appearance of ulcer	Reddened area of skin that is still intact (unbroken). Nonblanchable (nonwhitening when press and release) with discoloration of skin and inflamed.	The skin blisters or forms an open sore. The sore is superficial with a shallow craterlike formation or blister at and/or adjacent to ulcer. The skin breakdown looks like a crater where there is damage to the tissue below the skin. The necrotic tissue (dead tissue) may be yellow or black in color.	The skin breakdown looks like a crater where there is damage to the tissue below the skin. The necrotic tissue (dead tissue) may be yellow or black in color.	The pressure ulcer has become so deep that there is damage to the underlying tissue. The necrotic tissue (dead tissue) may be yellow or black in color with extensive eschar. (sloughing tissue)
Additional characteristics	Intact surrounding skin. May be painful and warm to the touch. This indicates that a pressure ulcer is starting to develop.	Broken skin area is red and painful and the area around the sore may be red and irritated.	May be draining and is at risk to become infected.	Destruction usually involves tissue loss down to the bones and joints and will be extensive and is painful. At great risk for infection.
Anatomy / Physiology	Skin intact.	Partial thickness breakdown in the skin involving partial loss of the 1st and 2nd layer of skin known as the epidermis and the dermis.	Full thickness skin loss involving damage or necrosis (tissue death) of the underlying tissues may extend down to but not through the fascia (muscle sheath).	Full thickness skin loss with extensive lower layer tissue destruction of fascia (muscle sheath), muscle, bone, ligaments and tendons.