

The Review of Properties of Aloe Vera in Healing of Decubitus Ulcer

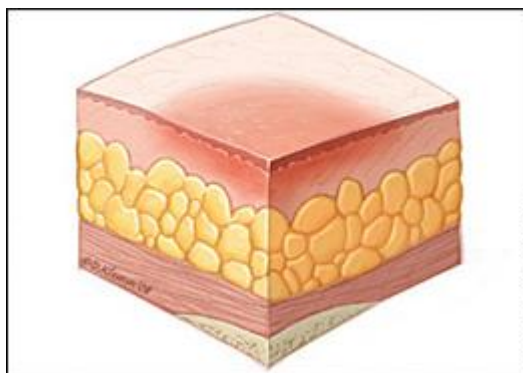
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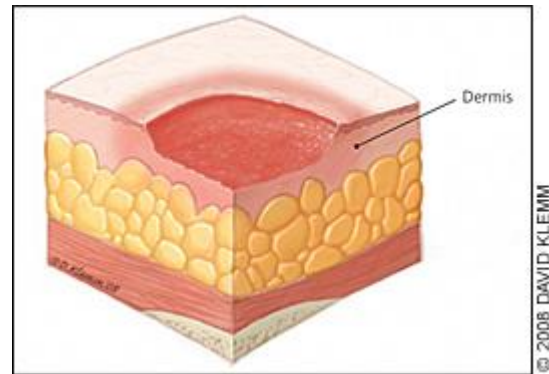
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Today, decubitus ulcers are the 3ed highest costly disease after cardiovascular, cancers and respiratory diseases. The death rates from decubitus ulcers are two to six times as much as from common problems, with sixty thousand deaths annually due to the complication of decubitus ulcers. Decubitusulcers are one of the types of an ulcer that breaks down the skin and continuous pressor over the area of the skin for a certain period causing tissue ischaemia, insufficient supplies of nutrition and oxygen to the tissues lead to tissue necrosis. The skin is able of sustaining pressure on the arterial side of around 32 - 34mmHg for only a small duration of time. External pressure must exceed the arterial capillary pressure (32 mmHg) to impede blood flow and must be greater than the venous capillary closing pressure (8 to 12 mmHg) to impair the return of venous blood. The occluding the blood supply, tissue distortion also damage the lymphatic flow, which leads to the stagnated of body waste products, material and enzymes in the damaged tissue. Due to distortion of tissues, soft tissues are compressed and sheared between the skeleton and support, such as a bed, chair when the person is sitting, lying, because something is pressing into the body, such as a shoe, a prosthesis, a surgical appliance and clothing elastic. Some health conditions influence blood supply and capillary perfusion, such as diabetes, the paralysed patient with a spinal injury loses sensation. In Indian, the prevalence of pressure ulcers in hospitalized patients has been reported to be 4.94% and 22% in nursing - home populations They often result in significant pain and distress, lead to other complications.

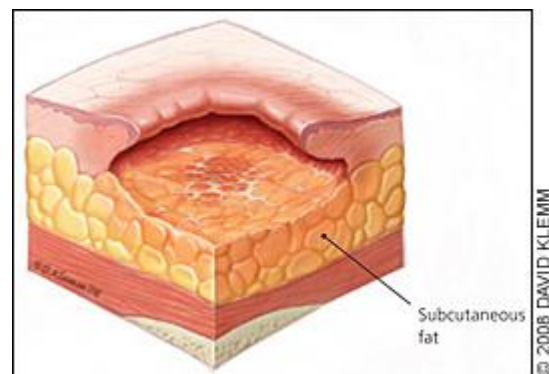
Stages of Decubitus Ulcer



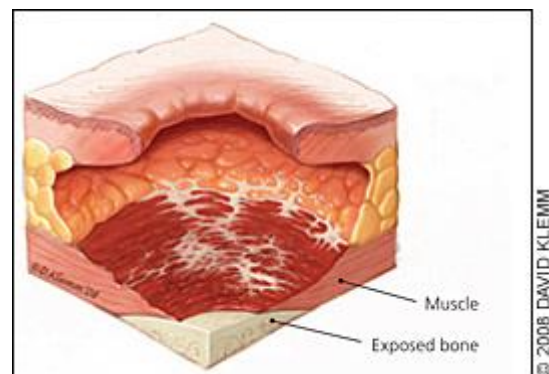
Stage I - pressure ulcer - Intact skin with non - blanchable redness of a localized area, usually over a bony prominence; darkly pigmented skin may not have visible blanching, and the affected area may differ from the surrounding area; the affected tissue may be painful, firm, soft, or warmer or cooler compared with adjacent tissue



Stage II - Pressure ulcer - the dermis is lost look like a shallow ulcer, partial - thickness, ulcer appear open and a red - pink wound appear, no slough; it appears as a ruptured serum - filled blister; this stage should not be used to describe skin tears and macerations.



Stage III - Pressure ulcer - Tissue loss; subcutaneous fat may be seen, full - thickness but bone, tendon, and not exposed other area, slough may be present or absent. It may include undermining and tunnelling.



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Stage IV - pressure ulcer - Full - thickness tissue loss with exposed bone, tendon, or muscle; slough or eschar may be present on some parts of the wound bed; often includes undermining and tunnelling

Prevention and Care of a Decubitus Ulcer in the home;

Changing the position every two hours with help of pillows or foam pads. Keeping skin clean, dry and applying moisturizing lotions. Providing well - balanced, nutritious meals and 8 - 10 glasses of water daily. Helping the person do daily range - of - motion exercising. Cleaning carefully after urination, bowel movement. stage one - wash the area gently with mild soap and water. Stage two should be cleaned with salt water (saline) rinse to remove loose, dead tissue. if patients with foul - simple saline dressings are instituted using cloth strips cut from cotton dhotis. These strips were boiled in a steamer that is meant for steaming pancakes for at least 20 minutes. Instead of using commercially available normal saline, normal drinking water mixed with 2 tsp salt per litre of water would be boiled for 5 minutes and used for cleansing.

A medicinal plant has to be used for various problems, skin lesions and treat is selected problems for its anti - tumour, anti - viral, antiseptic, anti - inflammatory, skin protection, anti - diabetic, anti - bacterial, and properties of wound healing. Aloe vera gel can not only increase the amount of collagen in wounds and moisture retention skin integrity, erythema reduction, and helps to prevent skin ulcers. the positive effects and contains 15 to 20 minerals, 18 amino acids, vitamins and water. Such minerals like copper, manganese, sodium, potassium, salicylic acid, iron, calcium, zinc, folic acid and vitamins A, B, C, E, B12 can be pointed out. Aloe Vera inhibits thromboxane helps to heal and control the infection and inflammation. Aloe Vera gel has Magnesium lactate prevents the reaction of histamine, leading to itching and irritation to skin and enhances the immune system activity and synthesis of the cytokine. Some regenerative materials are related to a compound known as Glucomannan which is high in polysaccharides such as mannose that effects of receptors of the fibroblast growth factor and stimulate the growth of tissues, increases collagen production and proliferation Aloe Vera gel not only increases the amount of collagen in wounds and thereby increase the wound healing process. Most of the studies show that since 99% of Aloe Vera gel is water, the gel increases the flexibility of skin, the mucopolysaccharides along with amino acids, reduce its fragility, zinc in Aloe Vera help skin integrity, reduce erythema and retain its moisture, help to prevent decubitus ulcers.

Alvera gel Preparation; Wash Alvera leaves with plain water, and then keep it upright in a small bowl for 8–10 mites and to drain the yellow - tinted resin to drain from a leaf. After the resin has drained completely, wash clearly and remove the thick skin. Once the leaf has been peeled, with help of a spoon. blend the gel until it's frothy and liquefied, which should only take a limited time and it can be used as a gel.

The prevention of ulcers is one of the main tasks of nurses which is also cost - effective, the use of traditional medicine

and herbal plants are one of the ways to treat the pressure ulcer

One of the physical methods (alternative medicine) in this document but the guideline stated that there is insufficient evidence on decubitus ulcers and other chronic types of wound to recommend the use of Alvera gel for treating pressure ulcers. Care of the ulcer can have significant economic problems.

Nursing care for ongoing evaluation, records and reports, and expensive medication, the available resources. Well - promising, and inexpensive methods from alternative medicine are necessary

Protocol for Alvera gel dressing

Objective; - To promote wound granulation and healing

Procedure;

- wash hands with soap and water
- Support the area and keep the patient in a comfortable position.
- Assess the wound status.
- Pour the 25 gram Alvera Gel in the sterile stainless steel bowl
- soak the autoclaved gauze pieces in the Alvera Gel solution.
- Irrigate and clean the wound with saline

References

- [1] Alam F, Islam MA, Gan SH, Khalil MI. Honey: a potential therapeutic agent for managing diabetic wounds. Evidence - Based Complementary Alternative Med 2014; Article ID 169130. doi: 10.1155/2014/169130.
- [2] Alcaraz A, Kelly J. The treatment of an infected venous leg ulcer with honey dressings. Br J 1997; 13 (3): 421 - 436
- [3] Nurs 2002; 11 (13): 859 - 860, 862, 864 - 86Allman RM. Pressure ulcer prevalence, incidence, risk factors, and impact. Clin Geriatr Med
- [4] Al - Waili NS, Salom K, Butler G, Al Ghamdi AA. Honey and microbial infections: a review supporting the use of honey for microbial control. J Med Food 2011; 14 (10): 1079 - 1096.
- [5] Applequist LL, Moerman, DE. Yarrow A Review of Ethnobotany, Bioactivity, and Biomedical Research. Econ Bot 2011; 65 (2): 209 - 225