HLTENN006

Author Note

**Case Study 1- Holistic Assessment of Patient**

**Medical History and Examination**

77 years old man Mr Jackson with poor oral intake, intermittent pain from his wounds diabetic foot ulcer and arterial ulcer. Patient was examined and suggested to stay under observation in wound management care. The patient has previous medical history of IHD CABG, COPD, ETOH, GORD, Postural hypotension and T2DN on insulin. He had a second degree burn on his left arm as well as pressure ulcer stage 3 was also identified.

**Types of Wound**

**Diabetic Foot Ulcer**

Diabetic foot ulcer is a wound which is usually observed in patients with diabetes. It is an open ulcer located on the lowermost part of the foot. It occurs due to high blood glucose level and poor circulation of blood.

**Arterial Ulcer**

These ulcers are often called as ischemic ulcers and are observed in patients having poor nutrition. It usually occurs at lower extremities. Arteries take oxygenated blood to the class and tissues. When the flow is lacking enough oxygen, the injury or damage to the arterial vessels occur. Nutrition and adequate sleep can help prevent these wounds in patients.

**Pressure Ulcer**

These ulcers develop due to the lengthy and constant stay on the bed. It is generally observed in elder individuals. It progresses due to pressure and compression of the skin.

**Burn**

These are frequently observed in patients having a burn or anything hot can also lead to burn injury. It may cause swelling, blister and painful skin.

**Wound Management Principles**

The wounds are difficult to manage in elderly patients because the age of the patient slow down the healing process by the tissues. The open wounds such as diabetic wounds, arterial ulcers are complicated wounds that can develop infections. The management of the sounds required moist healing, vacuum-assisted closure, and grafting in some cases. The diabetic ulcers take more time for healing as compared to other wounds. Use of pain killers and antibiotic therapy is usually suggested for the anticipation of the contamination and infection. The risk of wounds development increase with the age of the patients. Infections can aggravate the wound management and outcome in coughing, fever and other skin infections. Appropriate and suitable dressings, cleansing and management is mandatory for these types of wounds to improve the healing process. Patients should be educated regarding wound care, management and hygiene. Disorder skin, the colour of wound, area or location of the wound is important to note while taking a history of the patient.

**Evaluation of Wound**

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| **Class** | **Diabetic Ulcer** | **Pressure Ulcer** | **Infected Arterial Ulcer** | **Burn** |
| Wound bed status | Pus-filled, disruption of skin and painful. | Blood, red, painful and degenerative | Red and degenerative skin with infection | Painful blisters |
| Wound characteristics | Cloudy wound, presence of infection, dehiscence observed and slough present | Reddened, degenerative and itching | Dehiscence observed because of infection and slough but the cut was clear. | Red in colour having tenderness and swelling |
| Wound measurement | Not required | Not required | Not required | Not required |
| Condition of skin | Deteriorating | Soft, warm and bleeding | Degenerative and warm | Red and blisters |
| Wound exudate | Bad-odour, rough wound, red in colour, slough and pus | Red and pressure wound. | Soft, mal-odour, red and infected | Blisters |
| Further assessment |  | Itching, reddened | Painful | Itching and burning |

**Expectation of Wound Healing**

Patients with diabetes and previous medical history of any surgery need more time for the healing of wounds. Age of the patient is also an important factor in the healing of the wounds. Patients with developing infections and contamination in the wounds would also need adequate time for wound healing (Lay-Flurrie, 2019). In case of fever and cough, the patient is required to be adjusted in a safe and clean environment to improve healing time. Multidisciplinary approaches and regular dressing can improve the healing time of wounds (Van Lieshout et al., 2018).

**Wound Management Plan**

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| **Category** | **Diabetic Ulcer** | **Pressure Ulcer** | **Infected Arterial Ulcer** | **Burn** |
| Moist wound healing | Wound should be covered and moist healing process can enhance healing as an action plan for the management of wound, less contamination risk, this procedure endorsed the production of collagen and defensive growth factors that will enhance healing and repair. | It would be helpful as the wound is rough and reddened, provide adequate time for healing, to decrease contamination and improve the healing process. | managed by moist wound healing as this would prevent the desiccation and also help relieve pain, the damage can be repaired early. | Not required. |
| Skin & risk assessment | Rough and degenerative skin will lead the wound to develop inflammation and infection and healing will be slow. | Blood and rough skin. Fungal or bacterial infection may lead to fever and other leading disorders. | With infections the wound would be degenerative, Fungal or other skin infections may lead to skin disorders, cough and fever. | Sweltering requires to be properly controlled on the wound such as the risk of infection and bleeding would be increased in such wounds (Van Lieshout et al., 2018). |
| Wound cleansing | Vital step for the cleansing of the wound comprises removal of debris and dead cells, and dressing scums, and to reduce contamination. Use antiseptics such as isotonic sodium chloride for cleansing along with this dressing. The dressing will prevent infections, constantly use sterile gloves for washing. | Distinctive dressing such as alginate dressing which will improve healing as it comprises of weed, Hydrocolloid plaster gel (Lay-Flurrie, 2019). | Use of occlusive dressing can prevent patient uneasiness. | warm and hard dressings can be used, antibiotic ointment will castoff as the skin wound is shallow and at the skin surface. |
| Pressure support and relieving devices | For diabetic ulcers the skin is usually soft normal should be applied and to intact the skin covers the wound, Skin tightening can be done by using plaster adhesive tape and grafting tapes. | Grafting tape | Dehiscence or grafting tape | Not required |
| Prevention programs | Adequate dressing, cleansing, use of sterile gloves, suitable nutrition as per diabetic guide, cotton swab and antibiotic medications, sprays and dry dehiscence films. Safe and clean environment and proper advocacy of summer/winter precautions to preclude fever (Lay-Flurrie, 2019). | Appropriate dressing regularly, least contacts with air and water to prevent infection, disinfected gloves and support for summer winter season. | Regular occlusive dressing and less contact with the atmosphere predominantly water and polluted air. Safe and clean environment is suggested for this kind of wound. | Least contact with air and water. Dressing used should be dry (Van Lieshout et al., 2018). Ointment therapy is required regularly. |
| Selection of wound dressing | Hydroactive paste, use of moist sodium chloride dressing. Saline solution with sterile gloves for cleansing, dry dehiscence mediators, antiseptics for dressing. | Alginate bandage | Occlusive and antimicrobial dressings to protect ulcer from infection. | Antibiotic Ointment |
| Secondary dressing | Hydroactive gels, intrasite gel, foam and cloth | Hydrocolloid gel | Foam wound dressing |  |
| Pain management timeframe | Pain killers can be used for instant pain relief. healing in 5 to 6 weeks and may take months | Pain killer and other analgesics | Painkillers | Ointment and pain-relieving cream for skin (Van Lieshout et al., 2018) |

**Health Education**

Sufficient nutrition is essential for the nourishment and energy of the patient suffering from multiple wounds. It has been observed that patients need to know the wound type, care plan and assessment to heal faster. The patient education in terms of adequate sleep, proper and nutritious diet, care, least contact with the air and polluted water is mandatory (Van Lieshout et al., 2018). Patient need education on elimination and cleansing of their wounds so that the healing process can be achieved as expected (Mervis & Phillips, 2019).

**Pain Management**

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| **Class** | **Diabetic Ulcer** | **Pressure Ulcer** | **Infected Arterial Ulcer** | **Burn** |
| Medications | Pain killer and antibiotics. | Pain killers | Painkillers | Antibiotic ointment |
| Pain management | Pressure therapies and grafting tape can help as infection aggravate the situation. | Pressure therapy such as redistribution apparatus (Mervis & Phillips, 2019) | Pressure therapies and pressure redistribution apparatus would be helpful | Pain-relieving emulsion for skin or peripheral use |
| Frequency and dose | Endone twice a day, esomeprazole once daily, hydromorphone twice a day and Panadol 3 times in a day. | Endone twice a day, esomeprazole once daily, hydromorphone twice a day and Panadol 3 times in a day or during pain. | hydromorphone twice a day and painkillers | Ointment, three times a day |
| Justifications for medication | Endone will be administered to relieve pain; Esomeprazole will be used to relief acidity of the stomach. | Endone will be administered to relieve pain; Esomeprazole will be used to help combat acidity of the stomach. | Endone will be administered to relieve pain. | For pain relief |
| Patient education for pain management | Regular and sufficient sleep to increase the healing process. Patient needs to avoid stress and also avoid aggravating factors such as incorrect diet as the ulcer is diabetic and unnecessary movement. | Regular sleep to increase the healing process. Avoid stress and also avoid aggravating factors such as inappropriate diet and unnecessary movement (Mervis & Phillips, 2019). | Adequate sleep to increase the healing procedure. Avoid stress and avoid irritating elements such as unfortunate diet and needless movement. | Avoid stress and also avoid aggravating factors such as inappropriate diet and unnecessary movement. Proper sleep to increase the healing process. |

**Case Study 2- Holistic Assessment of Patient**

**Medical History and Examination**

85 years old Mrs Miriam Gold with fluids overload, pneumonia and metastasis cervical cancer was admitted. Patient was examined and found with a malignant wound on groin and suggested to have wound management at hospital (Lay-Flurrie, 2019). The patient has previous medical history of COPD, GORD, and CABGs. She was drowsy and vague and lives with her husband however, the family do not want any further treatment.

**Types of Wound**

**Malignant Wound on Groin**

Malignant wounds usually occur because of the cancer cells and their infiltration to blood and lymph vessels. It causes loss of tissue sensitivity and ultimately death of the tissues. It appears in the form of lesion and can lead to metastasis.

**Venous Ulcer**

Venous ulcer is caused by the poor blood flow in the veins and lower limbs. It usually transpired in legs and cannot heal without proper management.

**Wound Management Principles**

The malignant and venous ulcers are complicated wounds that are difficult to manage in elderly patients because the age of the patient slow down the healing process of the tissues. The management of the sounds required moist healing, vacuum-assisted closure, and compression therapy in case of venous ulcers. Use of pain killers and antibiotic therapy is usually suggested for the anticipation of the contamination and infection (Lay-Flurrie, 2019). The risk of wounds development increase with the age of the patients. Infections can aggravate the wound management and outcome in coughing, fever and other skin infections. Appropriate and suitable dressings, cleansing and management is mandatory for these types of wounds to improve the healing process. Patients should be educated regarding wound care, management and hygiene.

**Evaluation of Wound**

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| **Class** | **Malignant wound on groin** | **Venous Ulcer** |
| Wound bed status | Disruption of skin, painful, pus and has sinus | Degenerative and moist |
| Wound characteristics | Rough wound, pus and degenerative skin | Yellowish, infected skin observed, sloping edges |
| Wound measurement | Not required | Not required |
| Condition of skin | Worsening and oozing | Soft, and warm, painful |
| Wound exudate | Bad-odour, excessive exudate, rough wound, slough and pus | Excessive |
| Further assessment |  | Itching, pain |

**Expectation of Wound Healing**

Patients with venous ulcers and malignant ulcers take more than normal time for their wounds to heal. It is suggested by the physicians that 3 to 4 months are required to heal venous wounds. Similarly, the age of the patient is also a significant factor in the healing of the wounds. Patients with developing infections and contamination in the wounds would need adequate time for wound healing (Lay-Flurrie, 2019). In the case of other infections, the patient is required to live in a safe and clean environment to improve healing time.

**Wound Management Plan**

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| **Category** | **Malignant wound on groin** | **Venous Ulcer** |
| Moist wound healing | Highly recommended as moist healing will improve healing time. Wound should be covered to enhance healing as an action plan for the management of wound. | Extremely helpful for this type of wound. would be helpful to decrease contamination and improve the healing process. |
| Skin & risk assessment | Uneven and degenerative oozing skin will lead the wound to develop inflammation and infection and healing will be slow. | Skin rough and slough with slopping ends at wound. Fungal or bacterial infection may lead to skin disorders |
| Wound cleansing | Vital step for the cleansing of the wound comprises removal of debris and dead cells, and dressing scums, and to reduce contamination. Use antiseptics for cleansing along with this dressing. The dressing will prevent infections, constantly use sterile gloves for washing. | No specific dressing is effective, however, the dressing such as Pentoxifylline (Trental) would be effective |
| Pressure support and relieving devices | Only skin tightening required which can be achieved through grafting tapes and plasters. | Vacuum-assisted closure, compression therapy is recommended which is proved to be effective. It would help in prevention of regeneration of wound. |
| Prevention programs | Adequate and regular dressing, cleansing, use of sterile gloves, suitable nutrition and care of summer/winter precautions to prevent fever. | Appropriate dressing required to be used regularly, least contact with air and water to prevent infection, disinfected gloves and support for summer winter season. |
| Selection of wound dressing | Hydrocolloid dressing and charcoal dressings twice a day would be recommended, sterile gloves for cleansing, dry dehiscence mediators, antiseptics for dressing. | Pentoxifylline (Trental) |
| Secondary dressing | Foam and charcoal dressing | Not required |
| Pain management timeframe | Pain killers can be used for instant pain relief. healing in 5 to 6 weeks and may take months | Pain killer and other analgesics |

**Health Education**

It is suggested that education for pain management, wound care, regular dressing and adequate sleep should be guided to the patient. It is essential to take an appropriate diet for the nourishment and energy as the patient is suffering from multiple wounds. It has been observed that patients need to know the wound type, care plan and assessment to increase their healing process. The patient education in terms of adequate sleep, proper and nutritious diet, care, least contact with the air and polluted water is compulsory (Lay-Flurrie, 2019). Patient should know how and when their would-be healed as education on elimination and cleansing of the wounds is necessary.

**Pain Management**

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| **Class** | **Diabetic Ulcer** | **Pressure Ulcer** |
| Medications | Pain killer to prevent pain and antibiotics to infection control | Pain killers |
| Pain management | Pressure therapies and grafting tape can help. | Pressure therapy such as compression therapy, vacuum assisted therapy. |
| Frequency and dose | Pain killers three times a day | As prescribed by the physicians or aspirin three times a day |
| Justifications for medication | Pain killer will be administered to relieve pain, | Analgesics will be administered to relieve pain |
| Patient education for pain management | Regular and sufficient sleep to increase the healing process. Patient needs to avoid stress and also avoid aggravating factors such as incorrect diet as the ulcer is diabetic and unnecessary movement. | Adequate sleep and diet, avoid stress and also avoid aggravating factors such as inappropriate diet and unnecessary movement. |

**References**

Lay-Flurrie, K. (2019). The properties of hydrogel dressings and their impact on wound healing. *Practice Nursing*, *7*, 00.

Mervis, J. S., & Phillips, T. J. (2019). Pressure ulcers: Prevention and management. *Journal of the American Academy of Dermatology*.

Van Lieshout, E. M., Van Yperen, D. T., Van Baar, M. E., Polinder, S., Boersma, D., Cardon, A. Y., … Lansink, K. W. (2018). Epidemiology of injuries, treatment (costs) and outcome in burn patients admitted to a hospital with or without dedicated burn centre (Burn-Pro): Protocol for a multicentre prospective observational study. *BMJ Open*, *8*(11), e023709.