HLTENN006

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**Holistic Assessment of Patient**

**Medical History and Examination**

A widowed 70 years old lives in a retirement village with a supportive son and 4 grandchildren. She got admitted with acute abdominal pain and tenderness having generalized abdominal swelling after one month of hysterectomy and developed a dehiscence wound. The patient was examined and suggested to have a split-thickness skin graft. She also refused to take a diabetic diet. She is under close observation in wound care managementhowever, she was physically active and alert.

**Types of Wound**

1. **Dehiscence Abdominal Wound**

Dehiscence wound is a major wound after an abdominal surgery that can lead to serious complications. Wound dehiscence can be produced due to a problem with suturing. There is various kind of suture that often cause dehiscence. It is formed as a result of the disruption of a wound. Certain factor such as fever, infection and surgical incision can interfere with the healing of the wound.

1. **Pressure ulcer**

Usually develop due to the prolonged stay on the bed, usually observed in elder people. It progresses because of pressure and compression of the blood vessels.

1. **Burn injury**

These are usually caused by the burn and can damage skin superficially. It may cause a blister and painful skin.

1. **Split Thickness Skin Graft Wound**

 It is standard management usually done for non-healing wounds. It involves the care and closure of wound which utilizes epidermis and dermis to enable skin heal and subordinate ways.

**Wound Management Principles**

Management of an open wound is complicated as the wound is a disruption which can lead to infection (Ramshorst et al., 2010). The management can be done by using vacuum-assisted closure. The wound management of this case was completed by split-thickness graft. This kind of graft would take 3 weeks to completely heal the wound. This is a procedure to heal and repair the abdominal wall of this patient. Antibiotic therapy would be suggested for the prevention of the infection. Risk patients would be more at risk if the age is above 65 years. Obese patients, systematic and other local infections, having previous surgery, dirty and soft skin is also associated with a high risk of these wounds. Inappropriate wound management, carelessness, excessive coughing, fever, intra-abdominal pressure and constipation can lead to major complication to dehiscence wound (Ramshorst et al., 2010). Accurate and precise calculation of the wound such as oedema, seroma and signs of swelling. Disrupt skin, haemorrhage and abdominal pressure and anatomical region would be assessed. Odour, colour, and pain would be noticed.

**2. Evaluation of Wound**

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| **Category**  | **Dehiscence Abdominal Wound**  | **Pressure Ulcer**  | **Split Thickness Skin Graft Wound** | **Burn Injury**  |
| Wound bed status  | Painful, disruption of the skin. | Red, painful blister | Red skin | Painful blisters |
| Wound characteristics  | Dull wound, presence of infection, dehiscence and slough  | Reddened, blistering skin and itching | Dehiscence | Red in colour with tenderness and swelling |
|  | Width=5 cm length=7cm, depth=1cm (approximate values) | Width=0.5 cm length=0.3cm, depth=0cm (approximate values) | Width=5 cm length=7.5cm, depth=0cm (approximate values) | Width=1 cm length=1cm, depth=0cm (approximate values) |
| Condition of skin  | Degenerative  | Deteriorating  |  | Red and blisters  |
| Wound exudate | Formed. Exudate is a mass of tissue and fluid that has leaked out of blood vessels or an organ, particularly in swelling. Cuts, infection or inflammation caused exudate to form. | Nil  | A mass of fluid observed.  | Nil  |
| Other assessment  |  | Itching  | Scar assessment and pain assessment  | Itching and burning  |

**3. The expectation of Wound Healing**

**Dehiscence Abdominal Wound**

1. The healing process may be prolonged by diabetes type II disease.
2. The detection of infection can help prevent the increasing healing process
3. Mobility and movement should be implied in the context of the abdominal area and abdomen.
4. The time of healing varies with integrity and nutrition intake. Different stages of wound healing are described in four steps, including hemostasis, swelling, proliferation and tissue remodelling. Neutrophils and platelets, along with macrophages work in coordination to prepare a mass to stop bleeding and help in restoring healthy tissue. First, blood clotting occurs that help to stop bleeding and form a protective barrier against the external environment. Then following blood clotting, the phase of inflammation occurs, which assists the growth of tissue, and later remodelling and maturation of tissue heal the wound.

**Split Thickness Skin Graft Wound**

1. After surgery, it took 3 to 5 weeks to heal wounds.
2. Mobility and stretching may injure the site.
3. Skin tear or redness can itch surrounding skin.
4. The systematic process of hemostasis involves repair, swelling and physiology of healing. Different stages of wound healing are described in four steps, including hemostasis, swelling, proliferation and tissue remodelling. Neutrophils and platelets, along with macrophages work in coordination to prepare a mass to stop bleeding and help in restoring healthy tissue. First, blood clotting occurs that help to stop bleeding and form a protective barrier against the external environment. Then following blood clotting, the phase of inflammation occurs, which assists the growth of tissue, and later remodelling and maturation of tissue heal the wound.

**Burn Injury**

1. The time frame of healing of the burning wound is one to three weeks.
2. Blisters can be infected that may delay the healing process.
3. If there is blood coming from blisters, then healing would be delayed.
4. The physiology of wound healing consists of blood clotting, inflammation, proliferation and maturation stages. Different stages of wound healing are described in four steps including hemostasis, swelling, proliferation and tissue remodelling. Neutrophils and platelets, along with macrophages work in coordination to prepare a mass to stop bleeding and help in restoring healthy tissue. First, blood clotting occurs that help to stop bleeding and form a protective barrier against the external environment. Then following blood clotting the phase of inflammation occurs which assists the growth of tissue and later remodelling and maturation of tissue heal the wound.

**Pressure Ulcer**

1. Pressure ulcers are an injury to the skin due to prolonged pressure on skin tissue.
2. In this integrated skin become thin and may have blood supply less than normal.
3. Moisture is a reason for the pressure ulcers.
4. Repositioning of the patient will help the wound to heal within the time frame.
5. Physiology of wound is pressure, shearing, friction and moisture.

**4. Wound Management Plan**

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| **Category**  | **Dehiscence Abdominal Wound** | **Pressure Ulcer**  | **Split Thickness Skin Graft**  | **Burn Injury**  |
| Moist wound healing  | Is required to keep the wound heal faster, an action plan for the management of wound, would take the least time to heal, less infection risk, this procedure promoted the production of collagen and protective growth factors that will enhance healing and repair.  | Required to provide adequate time for healing, to reduce infection and enhance the healing process. | It is required to be managed by moist wound healing as this would prevent the desiccation and excavating of the wound. Mechanical damage can be repaired | Not required.  |
| Skin & risk assessment  | Skin will lead the wound to develop infection and healing will be slow, grafting will make the skin tough to absorb abdominal pressures and will make the skin intact.  | Blistering and rough skin. Any fungal or bacterial infection may lead to fever and other skin disorders (Boyko, Longaker & Yang, 2018).  | Fungal or other skin infections may lead to skin disorders and fever.  | Blistering requires to be properly handled such as the risk of infection and bleeding. |
| Wound cleaning  | An important step for the cleansing of the wound includes removal of debris and dead cells, and dressing scums, and to reduce contamination. Use antiseptics for cleansing along with an appropriate dressing. The dressing will prevent infections, always use sterile gloves for cleansing.  | Special dressing such as alginate dressing which will enhance healing as it contains seaweed (Boyko, Longaker & Yang, 2018). Hydrocolloid dressing gel. | Use of aquacel can prevent patient discomfort and healing time would be short. Aquacel is used as a primary dressing for wounds. It is prepared from sodium carboxymethylcellulose. The dressing engrosses and interrelates with wound exudate and forms a soft, gel of hydrophilic. It is permeable that ruses bacteria and imitates to the curves of the wound whereas having a micro-environment that is supposed to enable the healing process.  | Antibiotic ointment will be used as the skin wound is superficial and at the epidermis. |
| Pressure support and relieving devices  |  |  |  |  |
| Prevention programs  | Regular dressing, cleansing of the wound, use of sterile gloves, adequate nutrition, cotton swab and antibiotic medications, foams and dry dehiscence films. Safe and clean environment and proper advocacy of prevention of wounds.  | Prescribed dressing regularly, less contact with air and water to prevent contamination, sterile gloves | Regular dressing and less comfort with the environment particularly water and contaminated air. A safe environment is recommended. | Avoid in contact with air and water. The dressing should be dry and warm. Ointment therapy regularly. It is the therapy used to treat wounds by providing the viscous and greasy external environment. It helps in healing as it emulsifies bases and dryness is removed by providing a moisturizing environment for wounds. It removes irritation and ease in application of dressings on wounds. |
| Selection of wound dressing | Hydrocolloid dressing. Saline solution with sterile gloves, dry dehiscence agents, antiseptics for dressing (Ramshorst et al., 2010).  | Alginate dressing  | Aquacel, a Hydrofiber wound dressing. | Antibiotic Ointment  |
| Secondary dressing |  |  |  |  |
| Pain management timeframe  | Pain killers Panadol 1000mg. healing in 4 to 5 weeks  | Pain killer  | Painkiller  | Ointment and pain-relieving cream for skin |

**5. Health Education**

**a) Dehiscence Abdominal Wound**

Adequate nutrition is required for the nourishment and energy to regain strength. Bed rest with minimum movement as the wound is located at the abdomen (Ramshorst et al., 2010). Eggs, zinc, grains and protein diet can help patients recover faster from wounds as eseential minerals and nurtoetes are provided by these food items. These food items are essentially required to help the patient provide enough energy, and requirements of proteins, mineral to enhance wound healing. Multidisciplinary care management, including clean and safe environment, suitable temperature, appropriate dressing. Use of analgesics can help managing pain. The tenacity of analgesia is not only to ease patients feel well but to enable primary ambulation, satisfactory oxygenation and diet. It is used to diminish the pressure reaction to surgery, enhances wound healing, and decrease the threat of emerging chronic wound soreness.

**b) Pressure Ulcer**

An appropriate and balanced diet along with supplements which includes sodium and calcium. Bed rest and minimum contact with air and water, suitable room temperature and appropriate dressing (Qu et al., 2018). The tenacity of analgesia such as the use of pain killer is not only to ease patients feel well but to enable primary ambulation, satisfactory oxygenation and diet. It is used to diminish the pressure reaction to surgery, enhances wound healing, and decrease the threat of emerging chronic wound soreness.

**c) Split Thickness Skin Graft Wound**

 An appropriate and balanced diet is required along with the supplement. Multidisciplinary care management, including clean and safe environment, suitable temperature, appropriate dressing. Cleaning and proper dressing would help the healing process faster.

**d) Burn Injury**

Appropriate care and minimum contact with air and water, regular dressing and care. Education regarding adequate nutrition such as: to consume vegetables rich in vitamin C because it supports healing. Zinc, grains and protein diet can help patients recover faster from wounds. These food items are essentially required to help the patient provide enough energy, and requirements of proteins, mineral to enhance wound healing. Maintain hygiene near burnt skin.

**6. Pain Management**

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| **Category**  | **Dehiscence Abdominal Wound** | **Pressure Ulcer**  | **Split Thickness Skin graft Wound** | **Burn Injury**  |
| Medications  | Pain killer  | Pain killers  | Pain killer | Antibiotic ointment  |
| Pain management  |  |  |  | Pain-relieving cream for skin |
| Frequency of dose | Endone twice a day, esomeprazole once daily, metformin twice a day, hydromorphone twice a day and Panadol 3 times in a day. | Endone twice a day, esomeprazole once daily, metformin twice a day, hydromorphone twice a day and Panadol 3 times in a day. | Hydromosphone twice a day. Panadol 3 times a day. Aquacel as per prescription.  | Three times a day  |
| Justifications for medication | Panadol and endone will be administered to relieve pain, Esomeprazole will be used to relief acidity of the stomach.  | Panadol and endone will be administered to relieve pain, Esomeprazole will be used to relief acidity of the stomach.  | Aquacel and Panadol will be administered to relieve pain.  | For pain relief  |
| Patient education for pain management  | Adequate sleep to increase the healing process (Ramshorst et al., 2010). Avoid stress and also avoid aggravating factors such as inappropriate diet and unnecessary movement. | Adequate sleep to increase the healing process (Qu et al., 2018). Avoid stress and also avoid aggravating factors such as inappropriate diet and unnecessary movement (LeBlanc et al., 2018). | Appropriate diet and sleep are essentially important to improve healing. | Proper sleep to increase the healing process. Avoid stress and also avoid aggravating factors such as inappropriate diet and unnecessary movement. |

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