PRESENTATION

ON COMMONLY USED

PRIMARY WOUND DRESSING

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SOME COMMONLY USED PRIMARY WOUND DRESSINGS

Wound dressing have a part to play in the management of wound.

AIM:

Looking at the;

Importance of wound dressings in wound healing.
Factors to consider in choosing primary wound dressing.

Discuss some effective primary wound dressings.
Focus of discussion: Surgical Wound.

SELECTING WOUND DRESSING

Assessment is necessary for effective wound management.

- **Assess the Individual**
- **Assess the wound.**
- **Assess the Environment**
- **Knowledge of the properties and**
- **functions of wound dressings.**

PRIMARY WOUND DRESSINGS

Primary wound dressing is applied directly to wounds to protect from contamination, absorb exudates and facilitate healing.

They are in the form of:-

- Self adhesives and do not need a secondary dressing.
- An interface layer between the wound and the secondary dressing.

PASTE BANDAGES

Paste bandages are used for the treatment of eczema, dermatitis and similar conditions.

TUBULAR BANDAGES

(STOCKINETTIES) These come in various types, and used to provide support or dress retention, protection to clothing or bedding, after applying large quantity of cream, ointment for dermatological conditions.

e.g. Tubifast and Tubigrip

WOUND CLEANSING AGENTS.

These are solutions used during dressing changes for cleansing the surface of the wound or surrounding skin. e.g.- Sodium chloride 0.9%

ANTIBACTERIAL AGENTS.

Topical agent that is applied to open wound to treat infections e.g.. Fusidine

WOUND DEBRIDING AGENTS.

Materials that are used to dissolve or degrade slough or necrotic tissue present in a wound e.g. Intrasite gel.

HYDROCOLLOID DRESSINGS

Key Features:

Self adhesive gel forming mass may contain sodium carboxymethylcellose,
gelatine, applied on a thin polyurethane film or foam sheet.
It is impermeable to water vapour
Causes no pain on removal.

Uses:

- For Light moderately exuding wounds
- Pressure sores
- Minor burns and traumatic wounds
- Facilitate rehydration
- Autolytic debridement of dry sloughing or necrotic wounds
- Management of wounds in paediatric care,
- acute and chronic wounds.

Examples: Tegasorb, Granuflex, Comfeel, Duoderm.

SEMI-PERMEABLE ADHESIVES FILM DRESSINGS

These are made from a thin sheet of polyurethane coated with a layer of acrylic adhesive.

Key Features:
Impermeable to liquids but permeable to moisture, vapour and gases.
Have wide ranges of uses – primary and secondary uses.

Uses: for Burns
Donor site
Surgical wounds
Superficial pressure sores
As secondary dressings in combination with alginates and hydrogels, patients confined to bed – friendly to skin on removal. Examples: Opsite, Tegaderm, Bioclusive, Cutfilm.

PERFORATED FILM ABSORBENT DRESSINGS

This is designed to combine a degree of absorbance with low adherence for management of lightly exuding superficial wounds.

Key Features:

Consist of an absorbent flees covered with plastic film containing series of small holes, arrange in a uniform patterns.
Plastic film prevents dressing adhering to wound, and holes allow passage of exudates through the absorbent layer.

Uses:

Treatment of surgical wounds
In combination with hydrogels and alginates.
Examples: Skin tact, Release, Melolin

CHARACTERSTICS OF IDEAL WOUND DRESSING

- Maintain humidity
- Remove excess exudates
- Allow gaseous exchange
- Provide thermal insulation
- Impermeable to bacteria
- Allow removal without causing trauma
- Non toxic and non allergenic
- Cost effective
- Availability

ALGINATE DRESSINGS

Alginate dressings consist, principally of calcium salts of alginic acid, a polysaccharide derived from seaweed.

Key Features:

The calcium alginate in contact with the wound exudates forms a gel on the wound surface that is believed to facilitate healing. The chemical and physical properties differ in the varieties of alginate on available. Therefore it has implication for selection for individual wounds. Plain or impregnated with silver.

Examples: Saesorb, Kaltogel, Kaltostat, Sorbsan, Tegagen, Acquacel.

LOW ADHERENT WOUND CONTACT LAYER

These are used as interface layer to prevent secondary dressings from adhering to wound surface, thereby preventing trauma.

Key Features: -
Come in varieties – plain or impregnated with, paraffin or antibacterial agent.

Uses: Burns, Skin tear.

Examples: NA dressing, Tricotex, Paraffin Gauze, Mepilex.

HYDRO GEL DRESSINGS

Consist of insoluble polymers with hydrophilic sites, which interact with aqueous solutions, absorb and retain water.

Key Features:

Removes slough and necrotic tissue by rehydrating dead t issue and enabling autolytic debridement.
Carries metronidazol to treat fungal and other malodorous wounds.

Uses: Sinuses, Infected wounds,
Sloughs and necrotic wounds.

Examples: Intrasite gel, Neugel, Granugel.

MEDICATED LOW-ADHERENT WOUND CONACT LAYERS

Some contact layers are medicated with antibiotics to manage infections.

Examples:

.Paraffin gauze medicated with antibiotics.

.Bactigras and Serotulle contain antiseptic.

.Inadin gauze contains polyethylene glycol has bactericidal effect. Inadine gauze, very effective for infected and bleeding wound.

.Chlorhexidine gauze, not very effective due to low antibacterial agent release.

POLYUNETHANE FOAM DRESSING

These dressings come in varying types and with different performance features and indications.
Most of them are available in both,
non adhesive and adhesive. The foam allows absorption of exudates.
Uses: Traumatic wounds, Leg ulcers, Minor Burns, Donor sites.

Examples:

- Lyofoam – allows passage of fluid
- Allevyn – has low-adhering wound contact with moderate exudates
- Tielle – allows vapour escape with low exudates.

SUMMARY

Wound healing progresses most rapidly in an environment that is clean, moist, insulated and protected from trauma and bacteria invasion. It is therefore dependent on the nurse's knowledge and understanding of the properties and functions of the wound dressings available in selecting the appropriate dressings for the effective management of wounds