DRESSING SELECTION

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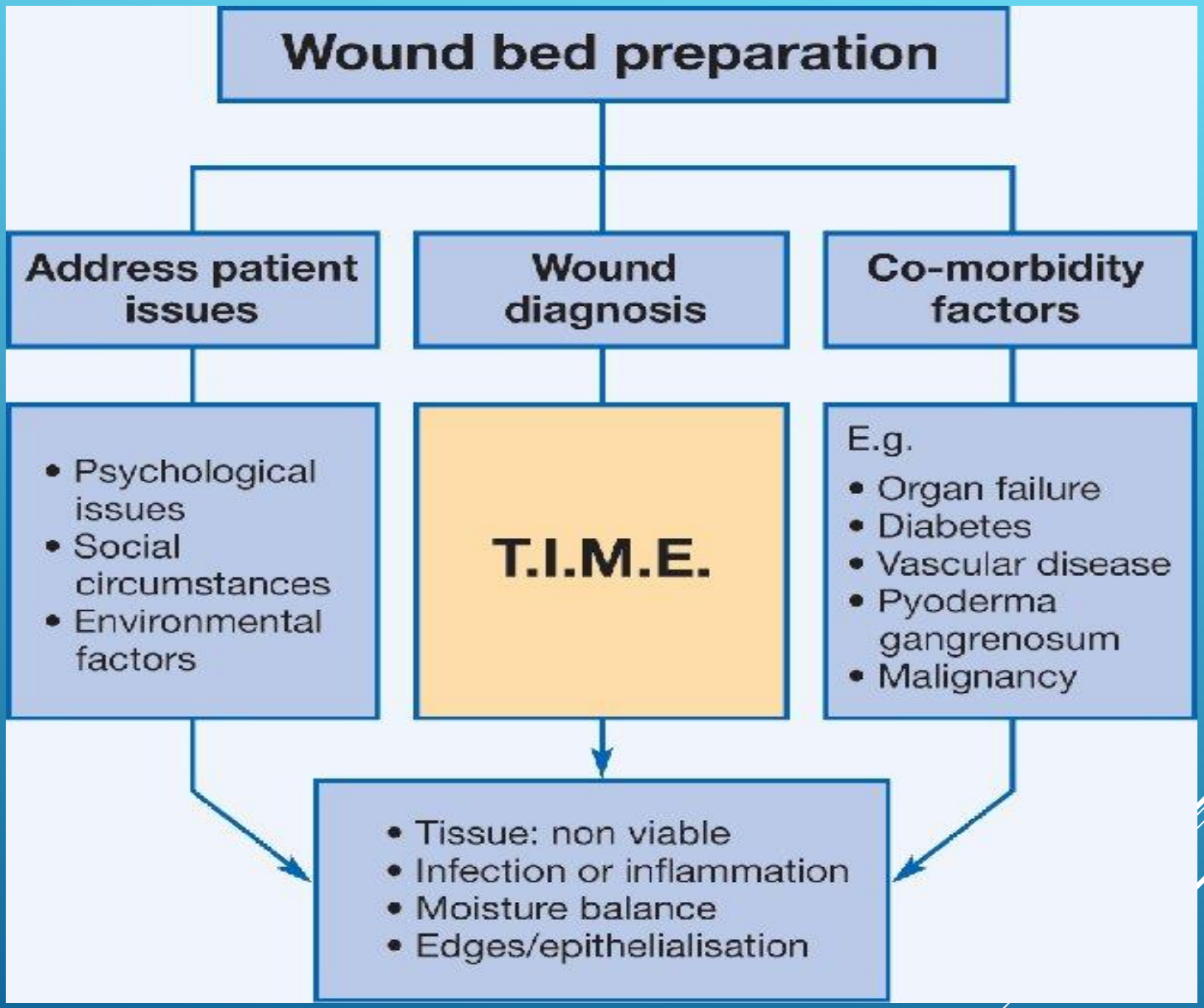
WOUND MANAGEMENT:

- Should be individually tailored in conjunction with the patient to meet their individual needs.


Wound bed preparation
Address patient issues
Wound diagnosis
Co-morbidity factors
• Psychological issues
• Social circumstances
• Environmental factors
T.I.M.E.
E.g.
• Organ failure
• Diabetes
• Vascular disease
• Pyoderma gangrenosum
• Malignancy
• Tissue: non viable
• Infection or inflammation
• Moisture balance
• Edges/epithelialisation

PRINCIPLES OF WOUND MANAGEMENT ARE:

- Comprehensive health assessment
- Wound assessment / documentation
- Identify cause
- If able eliminate or control factors that impair healing.
- Set short and long-term goals
- Implement a management regime
- Review / revise
- Achieve optimal outcomes

THE 'IDEAL' WOUND DRESSING:

- Controls exudate to achieve and maintain a moist wound environment.
- Prevents maceration of the peri-wound skin
- Eliminates any dead space (cavity filler)
- Maintains optimal temperature
- Optimal pH
- Prevents contamination
- Allows gaseous exchange
- Is free of matter or toxic components
- Is acceptable to the patient
- Cost effective

PREPARE THE LEG AND WOUND

- Prepare the surrounding skin cleanse the leg at dressing changes
- **Cleanse** the leg at dressing changes
- **Maintain skin integrity**
- **Control venous eczema**
- **Cleanse** the ulcer
- Consider **debridement** of non-viable tissue
- Consider treating **clinical infection**
- Select appropriate **primary dressing**

VENOUS LEG ULCER (VLU)GUIDELINES

- First published in association with AWMA and NZWCS in 2011.
- Summary of recommendations.
- Includes preventing initial occurrence VLU.
- Assessment, Diagnosis and Referral.
- Management of pain associated with VLU.
- Management of VLU.
- Preventing reoccurrence.
- Special Populations.
- Quick reference guidelines.

MOIST WOUND ENVIRONMENT

- Dressings that regulate wound moisture is recommended.
- Effective dressing should prevent maceration or further skin deterioration.

COMFORT AND PATIENT EDUCATION

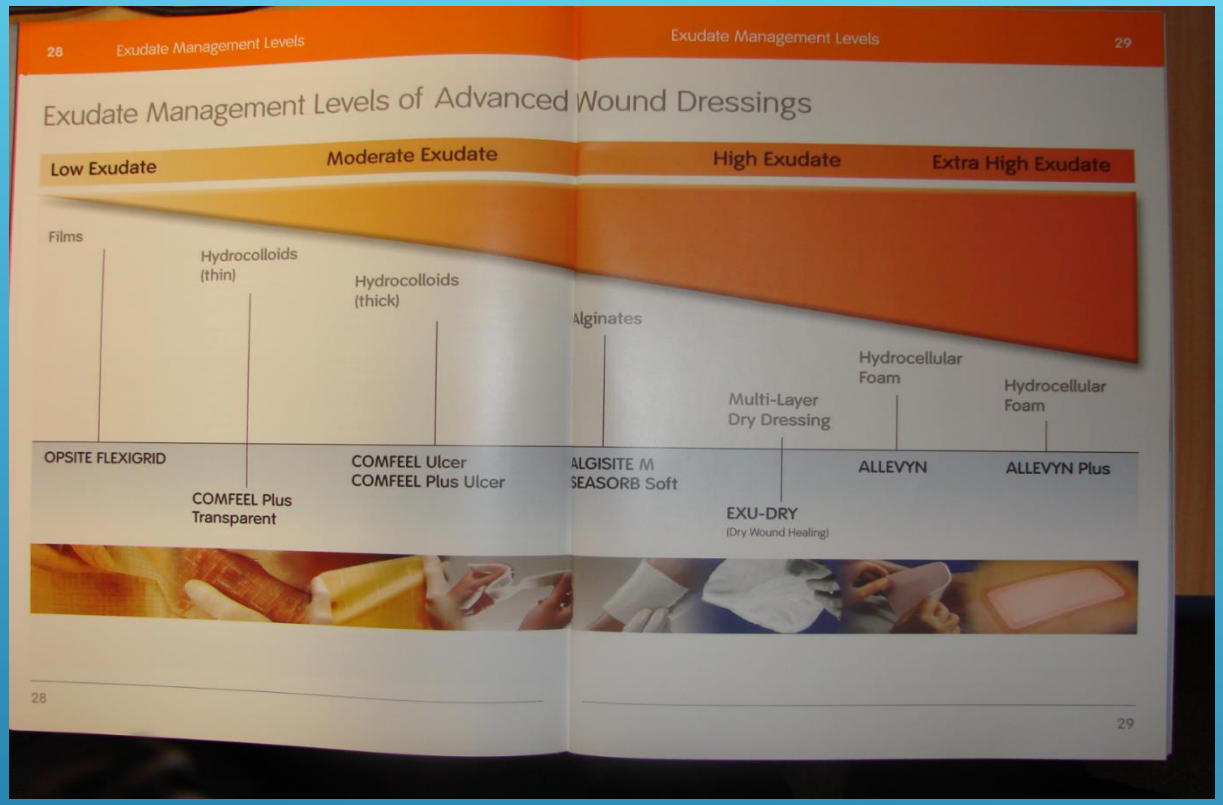
- Pain
- Pt characteristics, preferences and lifestyle
- Factors related to wound aetiology
- The dressing regime

CHOOSING A DRESSING

- Purpose of the dressing
- The specific characteristics of the dressing
- The correct application of the dressing
- The expected wear time of the dressing

EXUDATE

- Delays healing
- Leakage / odor
- Major discomfort for patient
- Maceration



EXUDATE MANAGEMENT


Wet
Moist
Dry

TYPES OF DRESSINGS

- Absorbent pads
- Absorbent cellulose
- Adhesive Island dressings
- Alginates
- Antibacterial
- Barrier film dressings
- Biosurgery
- Capillary wound dressings

- Foams
- Hydrocapillary and multilayered absorbent dressings
- Hydrocolloids
- Hydrofibres
- Hydrogels
- Low-adherent dressings
- Paste bandages

CONTINUED

- Silicone dressings
- Silver and charcoal dressings
- Vapour- permeable dressings

CONTINUED

ABSORBENT PADS

- Gauze, combine have some absorbency.
- NOT SUITABLE AS A PRIMARY DRESSING IN ANY OPEN WOUND !!!
- Cost effective secondary cover for exudating wounds.

ABSORBENT CELLULOSE DRESSINGS

- One piece multilayer highly absorbent
- They wick exudate away from the surface of the wound bed.
- Intended for heavy exudating wounds
- Maybe placed directly onto the wound
- Mesorb™
- Exu-dry™

ADHESIVE ISLAND DRESSINGS

- Consist of a central pad with a wider band adhesive backing.
- Little absorbency
- Used on post-surgical wounds

ALGINATES

- Contain calcium or sodium alginate derived from seaweed. As they interact with the wound they react and structure alters from fibrous to a gel.
- Some dressings can be removed in one piece others require flushing from the wound.
- Used on wounds moderate to heavily exudating
- Require secondary dressing.

PROTECTIVE SKIN PREPARATIONS:

- Protect skin using small pad provided designed to provide invisible barrier on the skin.
- Helps protect fragile skin against adhesives and moisture damage
- Skin prep™ , Cavilon™ are examples

BIOSURGERY

- Maggot therapy popular due to increased MRSA bacteria.
- They debride necrotic, sloughy and infected tissue.
- Ordered from Wellington
- Nurse specialist or consultant decision for this therapy

CAPILLARY WOUND DRESSINGS

- Made from polyester filaments and polycotton fibers.
- Absorbs exudate into the middle layer and wicks laterally in a capillary action
- Suitable for heavily exudating wounds
- Vactex™

FOAMS

- Made from polyurethane soft open cell sheets either single or multilayered.
- Moderate to heavy absorbency
- Requires patient education
- They vary in absorbency so be sure of the product your area is using.
- When should they be removed??

HYDROGELS

- 60-80% water content
- Either absorb exudate or hydrate wounds such as necrotic eschar aiding debridement.
- Used on moderate to low exudating wounds
- Require a secondary dressing

HYDROCOLLOIDS

- Developed from stoma products originally
- Interactive dressings
- Hydrocolloid base made from cellulose, gelatins and pectins with a backing made from polyurethane film or foam.
- No secondary dressing is required
- Many shapes, sizes, thickness
- Effective on moderate to low exudating wounds

HYDROFIBERS

- Made from hydrocolloid fibers that gel in the prescience of exudate.
- Highly absorbent
- Not suitable over dry necrotic wounds

SILICONE DRESSINGS

- Mepilex® Border Post-Op is an all-in-one post-op dressing that effectively absorbs and retains blood and surgical exudates . It is intended for acute wounds, such as surgical wounds, cuts and abrasions. It is optimised for post-op use and blood absorption. The Safetac® layer ensures that the dressing can be changed without damaging the wound or surrounding skin[3].
- Minimises incidence of blisters[1]
- Excellent exudate management optimised for post-op wounds[2]
- Minimises pain and trauma at dressing changes[3]
- Highly flexible pad that promotes patient mobilisation[4]

SILICONE DRESSINGS

- minimizes pain and trauma at dressing changes
- self-adherent - no secondary fixation needed
- moisture proof and bacteria proof film backing
- may be used under compression bandages
- promotes patient comfort during wear
- designed for ease of use
- may remain in place for several days depending on the condition of the wound
- may be lifted and adjusted without losing its adherent properties
- low potential for skin irritation and allergy

TULLES MEDICATED OR NON-MEDICATED

- Low adherent contact layer.
- Open weave, water repellent
- Used on minor burns or trauma wounds
- Some are impregnated with antiseptics or antibiotics.
- Need a secondary dressing

VAPOUR- PERMEABLE DRESSINGS

- Moist wound healing have no absorbency
- Not for infected wounds
- Great for post operative wounds 2-3 days after surgery

TOPICAL ANTIMICROBIALS

Silver

Cardexomer Iodine

Honey

CADEXOMER IODINE

- Composed of hydrophilic beads containing iodine absorbs up 6 times it's own weight
- Exudate is taken into a the iodine it swells and forms a gel thus releasing iodine.
- Releases iodine for up to 3 days
- Should not be used in patients with thyroid problems, lithium, pregnancy or iodine sensitivity.

SILVER

- Fast acting broad spectrum effective antimicrobial.
- Widely used in modern wound care and also historically.
- Costly e.g. one sheet aquacell Ag $29.

MODE OF ACTION FOR SILVER

- In either ionic or nanocrystalline forms
- In the presence of moisture such as body fluids silver ionizes to release silver ions. Known as "hydro activation" and is the method by which silver dressings release silver.

Antimicrobial properties

Autolytic debridement

Deodorize malodorous wounds

Stimulate granulation

Anti-inflammatory action

Reduce scarring

Removes necrotic tissue

HONEY

ADVANCED THERAPY

- Growth factors
- Protease- modulating wound management
- Hyperbaric Oxygen
- Topical negative therapy

CASE STUDY

- Admission to DN 10/11/2011
- Wound 0.8cm x 0.9 cm over lateral bony prominence surrounding area dusky and suspicious looking. Foot pale and suffering from pain over foot and lower calf area.
- Urgent referral to vascular clinic where it was debrided and daily dressings commenced.

- Lt fem pop bypass and Lt 5th toe amputation dec 2011
- VAC dressings commenced
- Aorto bifemoral bypass and amputation Lt 4th toe Jan 2012

7TH JAN 2012

7TH JAN 2012

FEB 2012

- Infected 3rd toe 14th march 2012 debridment and bone removed.
- Patient reports 20kg weight loss over the last 3 months.

20TH APRIL 2012

QUESTIONS???

- **Fox, C. (2002). Honey as a dressing for chronic wounds in adults. *British journal of Community Nursing*, *7*(10), 530-534.**
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- **Stephen-Haynes, J. (2004). Evaluation of a honey-impregnated tulle dressing in primary care. *WoundCare*(June), s21-s27.**
- **White, R. (2005). The benefits of honey in wound management. *Nursing Standard*, *20*(10), 57-64.**