# THE VERY BASICS IN WOUND CARE

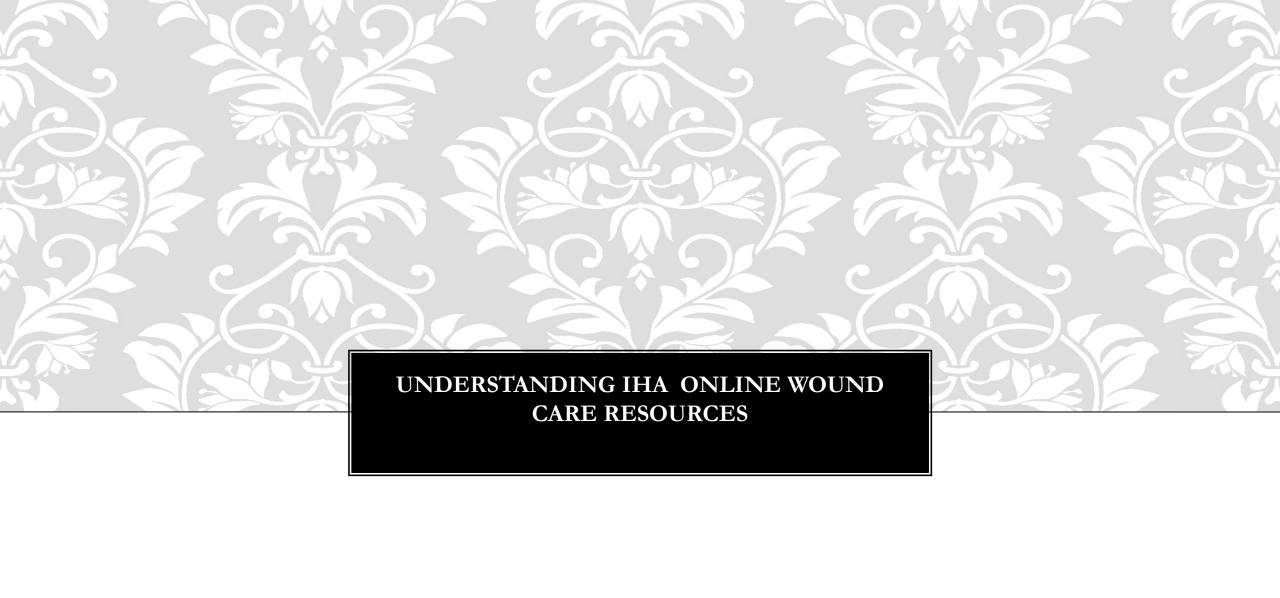
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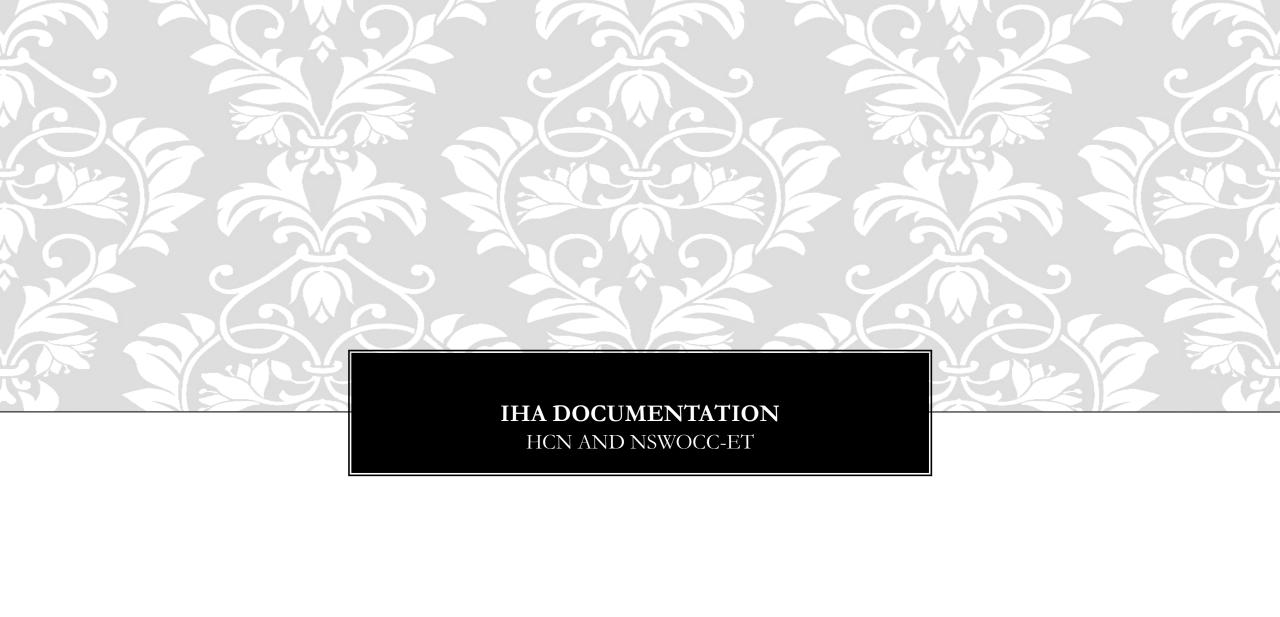
## DISCLOSURE OF FINANCIAL SUPPORT

I Michelle Fleur de Lys
have no actual or potential conflict of interest
in relation to this program/presentation.

# **OBJECTIVES**

- 1. To understand IHA wound care resources, and how to access the online notes, photos and product information.
- 2. To understand different types of necrotic tissue and determine when the wound is progressing.
- 3. To understand red flags for diabetic, arterial, venous and pressure wounds.
- 4. To understand basic dressing selections.





#### HOME HEALTH CHARTING IN MEDITECH

# Pixalere Patient File

# **Wound Management Plan**

#### **Patient Name**

Pix ID

PHN

Wound Location Right Ankle/Foot

Wound Alpha E

Wound Start Date 18/Feb/2012

#### Products to Apply

0 Drsg tray, 0 No sting barrier spray 28ml, 0 Normal Saline 100ml Dual Top, 0 Scissors, 0 Seasorb Ag rope 3 x 44 cm, 1 Gloves - unsterile 1pair, 1 Kling Bandage 5cm x5M, 1 Mesorb 10x13 cm,



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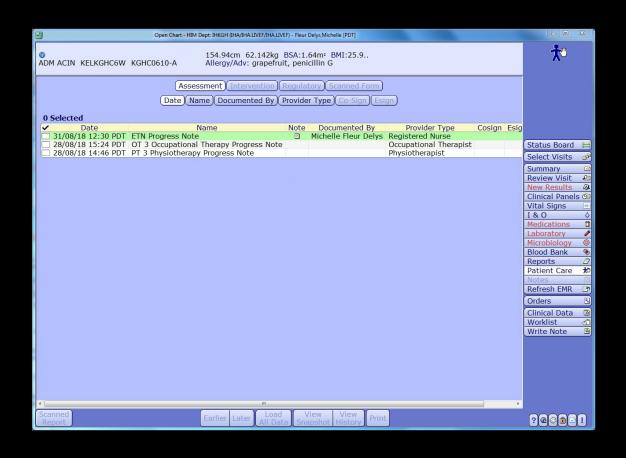
#### Nursing Care Plan

Goal: Debride necrotic slough and prevent infection
Plan: Cleanse with NS, protect periwound with skin prep. Silver nitrate to wound
edges (activate with H2O). Seasorb ag to wound bed, mesorb and wrap in kling.
Client wears blue booties at night.

### Dressing Change

Q2 days

# ETN (NSWOCC) DOCUMENTATION IN ACUTE



ETN Progress Notes – Meditech

Located in the patient's chart

under clinical notes. Photos are attached
to the notes, sometimes you have to click

on the attachment icon.



#### AVAILABLE RESOURCES

Advanced

Ontario

□ WoundPedia



interprofessional approach to provide comprehensive, evidence informed assessment and treatment. The current version of the Skin and Wound Care Practices manual only addresses the scope of practice of nurses. A future phase will include scope of practice for Allied Health Professionals in wound care. Although the decision support tools included are intended for use by nurses, other health professionals may find the content useful in their practice.

#### Education

Promotion & Prevention

Transportation (Patient)

Rehabilitation

Residential Care

Respiratory Care Skin and Wound Care Practice Manual

Renal Care

Social Work Stroke Care

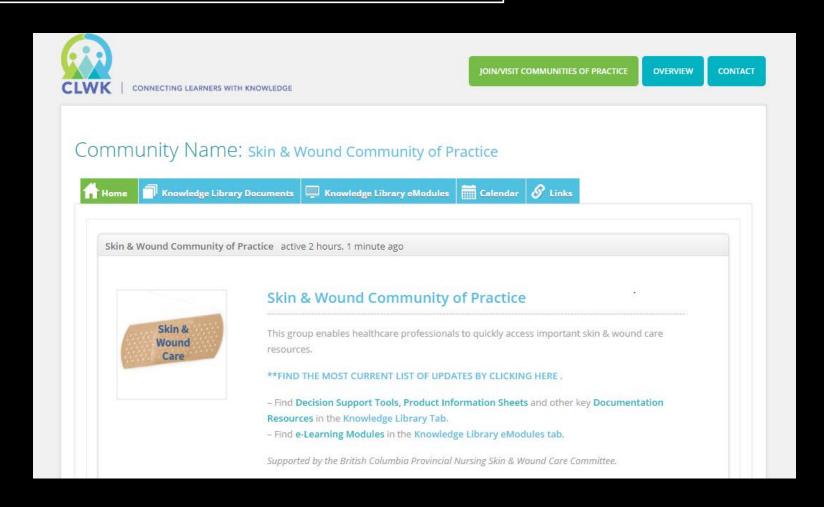
Surgical Care Transfusion Practices  ★ Resource Type: Competency Validation & Practice Review Requirements (5) ★ Resource Type: Instructor Led Classes (5) ⊞ Resource Type : Self Learning (6) ■ Resource Type: WebEx Recordings (18)

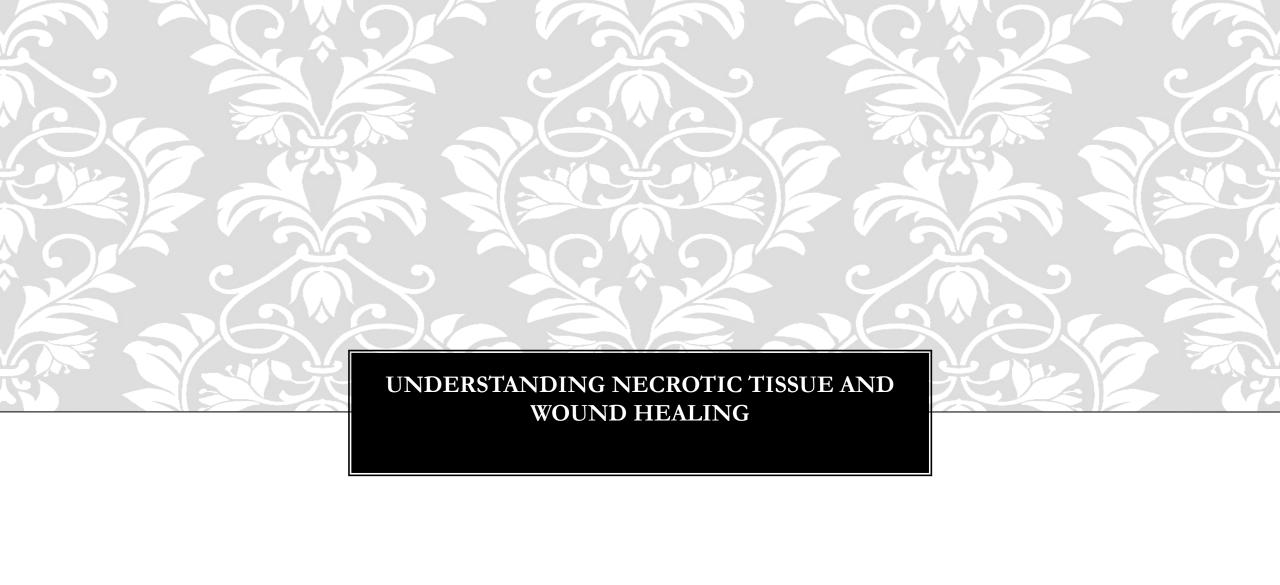
#### PROVINCIAL INFORMATION

Skin & Wound Community of Practice

CLWK: Connecting Learners With Knowledge

https://www.clwk.ca/commu nities-of-practice/skinwound-community-ofpractice





# **NECROTIC TISSUE**

- Impedes healing
- Physical barrier to granulation tissue
- Prevents wound contraction
- Prevents re-epithelialization
- Fosters inflammation
- May lead to infection
- Promotes odour



# NECROTIC TISSUE WHAT WE DO NOT WANT TO SEE

Avascular tissue that lacks blood supply and referred to as:

# NECROTIC, DEAD, DEVITALIZED, NON-VIABLE

- Prevalent types of necrotic tissue include:
  - Slough
  - Fibrin
  - Eschar
  - Gangrene
  - Hyperkeratosis



# **SLOUGH**

Soft, moist necrotic tissue that may presenting as tan, yellow or green in colour.



- Clumps
- Loose or firmly attached
- Adherence to wound base and/or wound edge

# **FIBRIN**

An insoluble protein formed from fibrinogen during the blood clotting cascade.



- White, yellow or tan
- Loose or firmly attached
- Adherence to wound base and/or wound edge

# **ESCHAR**

Dead tissue that indicates full-thickness tissue loss.



- Black or brown
- Hard and scab-like
- Firmly attached to wound base

\* May be dry and stable or soft and boggy

### **GANGRENE**

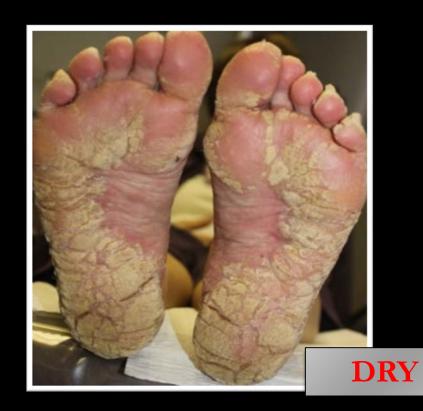
Death or decay of body tissue which may involve bacterial infection. It is usually due to loss of blood supply and may be wet or dry.





#### **HYPERKERATOSIS**

Thickening of the horny layer of epidermis or mucus membrane.



- Soft, soggy or hard
- White/grey
- Firmly attached
- May surround wound edge



## **NECROTIC TISSUE**

As depth of tissue damage increases, the colour of necrotic tissue changes.

White/Gray
Tan/Yellow
Brown/Black

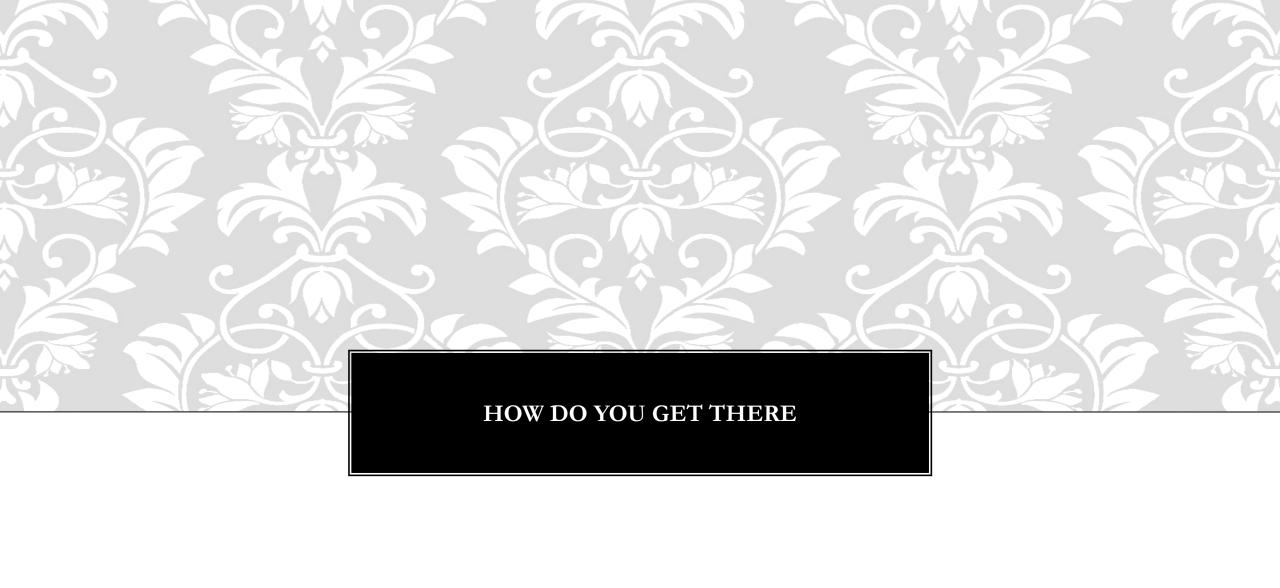
Worsening Tissue Damage

# GRANULATION TISSUE WHAT WE WANT TO SEE

New connective tissue and microscopic blood vessels that form on the surfaces of a wound during the healing process.







# **DEBRIDEMENT**

- Autolytic
- Enzymatic
- Mechanical
- Biological
- Conservative Sharp WoundDebridement
- Surgical



## **AUTOLYTIC DEBRIDEMENT**

Liquidation of devitalized tissues by bodies naturally present enzymes.

Dressings can support but the process is slow.





## **ENZYMATIC DEBRIDEMENT**

- Topical application of proteolytic enzymes to breakdown devitalized tissue
- Not harmful to healthy tissue
- Physician/NP order required for collagenase



# MECHANICAL DEBRIDEMENT

- Use of mechanical forces to remove nonviable tissue
- Wet-to-dry dressings
- Wound irrigation
- Pulsatile lavage
- Can be painful



# **BIOLOGICAL**

First described in 1500's
Release of enzymes that liquefy necrotic tissue
Secrete substances that destroy bacteria





**SELECTIVE** 



# SURGICAL DEBRIDEMENT

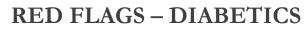
Expensive

Quick

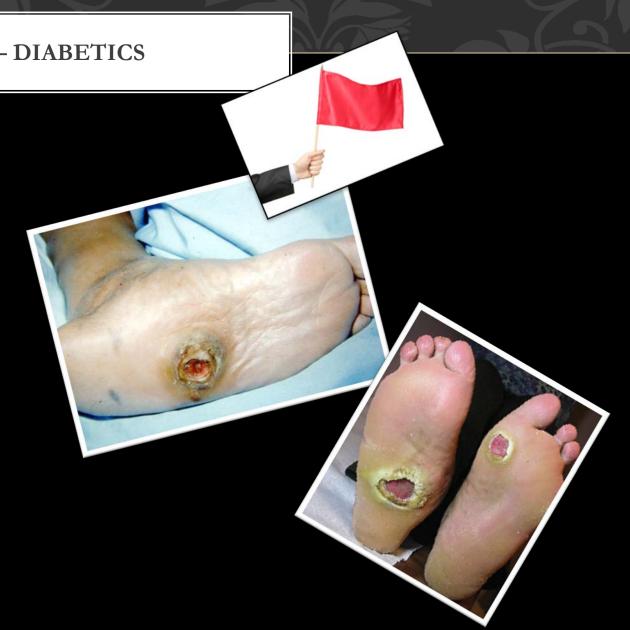








PAIN
IN THE
NEUROPATHIC
FOOT



#### **DIABETICS**

Compromises blood flow and sensation to limbs and causes decreased visible signs of infection

What you may see:

Uncontrolled blood sugars.

Difference in temperature between limbs.

Slight peri-wound redness and increase in wound size.

Wound that probes to bone.





Areas of wet gangrene and spreading or systemic infection in diabetic foot ulcer, especially if the wound probes to bone, are potentially limb or life threatening and require immediate attention.

Antibiotics, debridement and offloading are needed.

# **DIABETIC**

Foot care - Check both feet at each appointment, shoes should be professionally fitted if any abnormalities.





**RED FLAGS – ARTERIAL WOUNDS** 

PERSISTENT NON HEALING ULCER

NEW OR INCREASING PAIN

AND OR A CHANGE FROM

DRY GANGRENE TO WET GANGRENE



#### **ARTERIAL**

Decreased blood flow and blunting of the inflammatory process decreases local infection symptoms.

Leave eschar that is dry and stable intact until blood supply has been determined.

Dry stable arterial wounds with eschar that become moist and boggy

at the edges or peri-wound redness are signs of infection.









Areas of wet gangrene and spreading or systemic infection in extremity arterial wounds, especially if the wound probes to bone, are potentially limb or life threatening and require immediate attention.

# **RED FLAGS – VENOUS WOUNDS**

**NEWLY FORMED ULCERS** 

**INCRESE IF SIZE** 

PERI-WOUND INFLAMMATION



#### **VENOUS**

Venous wounds may exhibit periwound inflammation and warmth caused by venous dermatitis, allergic contact dermatitis or irritant contact dermatitis.

Chronic inflammation may present as erythema, scaling, erosions, & excoriations.







# **HEMOSIDERIN STAINING**

# EARLY CHANGES



# LATE CHANGES



## **VENOUS**

Compression bandaging is for treatment, stockings are for prevention.

COMPRESSION IS FOR LIFE! The right compression is the one the patient will wear.











RED FLAGS – PRESSURE INJURIES

**DERERIORATION** 

AND OR NOT

PROGRESSING AS EXPECTED

NEW ABILITY TO PROBE TO

**BONE** 

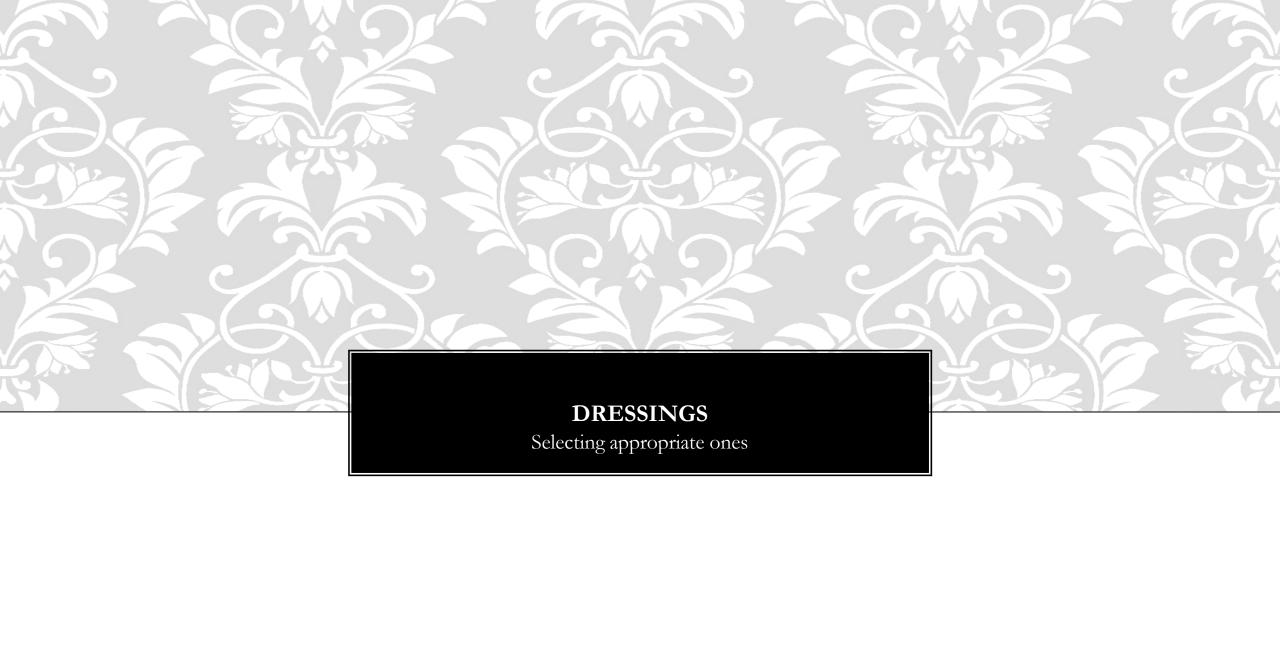


## **PRESSURE**

Consider osteomyelitis if the wound probes to bone.

Lower leg compromises of any kind be aware of pressure concerns to heels.





### **DRESSING DECISIONS**

Dressing selection is not just a rudimentary process, but rather a well—thought-out pathway that can help lead a wound to closure.

The clinician needs to understand the current state of the wound as well as the product components of the dressing and how they will meet the needs of the wound or ulcer.

## WHAT SHOULD THE DRESSING DO

Promote rapid healing
Debridement of necrotic tissue
Prevent/treatment of infection
Reduce dead space
Absorption of exudate
Maintenance of moist environment
Protection and insulation
Reduce pain
Cost-effective

## THINGS TO ASK

What is it made of and what can it do for this clinical situation that I am dealing with?

Water, polymers, collagen, cellulose, hyderpolymer, top secret patented ingredients, honey, iodine, oxygen (and much more).

What is the mechanism of action?

Absorbs drainage, Hydration, hydrophobic, protects tissue, conforms to depth, conforms to margins, provides active pathogen control, provides odor control, stays in place, adhesive/ non-adhesive.

### **DECISIONS BASED ON WOUND APPEARANCE**

Divide your wounds into one of the 4 categories then look at what you are going to do.

- 1. Necrotic, do you need to debride
- 2. Infected, control bioburden
- 3. Draining, going to absorb
- 4. Granular, provide moisture

Most of the wounds will be in one of these four categories.

Often with 2 of these things happening.

## KEEP THE PROCESS SIMPLE

- 1. Protect the skin
- 2. Fill the wound
- 3. Cover the wound
- 4. Prevent or treat the cause



There are over 6000 products out there so we need to keep the decision process as simple as possible.

## **RULE OF THUMB**

If it is wet dry it out

If it is dry wet it down

If it is dirty clean it out

### THINGS TO PONDER

# Dressings do not heal patients, patients heal patients.

- Always determine etiology of the wound it is the diagnosis that drives healing, treatment and plan of care.
- Know the dressings you have available.
- Know when to refer, it is a team effort.
- Know your patient's situation and listen to their story.

## THE TYPE OF PRODUCT DEPENDS ON

Wound Characteristics

Wound bed composition

Infection

Wound depth

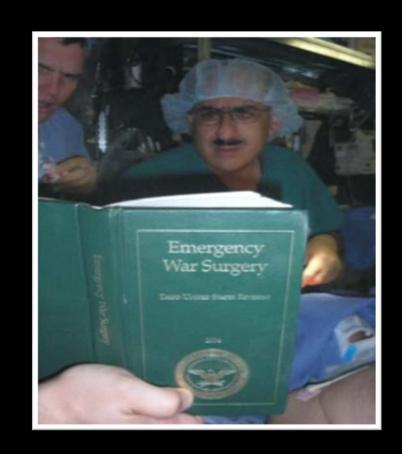
Exudate amount

Cost effectiveness

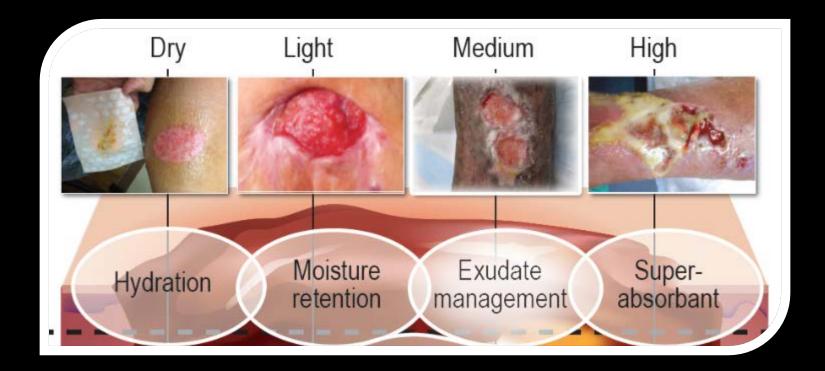
Ease of use

Consider the setting

Client concerns



# WHAT IS HAPPENING IN THE WOUND



# DO WE NEED TO DEBRIDE?

Hydrogel

Hypertonic Gauze

Cadexomer Iodine

Dakins Solution



# IS THE WOUND INFECTED (LOCAL / SYSTEMIC)?

Antimicrobial or antiseptic dressings

Iodine based

Silver based

PHMB

Topical antibiotics

Dakin's solution



# DO WE NEED TO PACK?

Gauze

for daily change

Hydrofiber or alginate

Moderate to heavy exudate

Impregnated gauze

Mesalt

PHMB

Antimicrobial



# MOISTURE BALANCE ADD OR ABSORB MOISTURE?

Water based gel
Cover Dressing: Composite:

Designed to maintain moisture balance they can remove and lock fluid away when too wet.

Mesorb

Mepilex foam

Alldress

Hydrocolloid can add

Calcium Alginate, Hydrofibers



## **CONCERNED ABOUT STICKING?**

For fragile wounds that you are concerned the dressing will stick and cause pain or damage with removal.

Adaptic

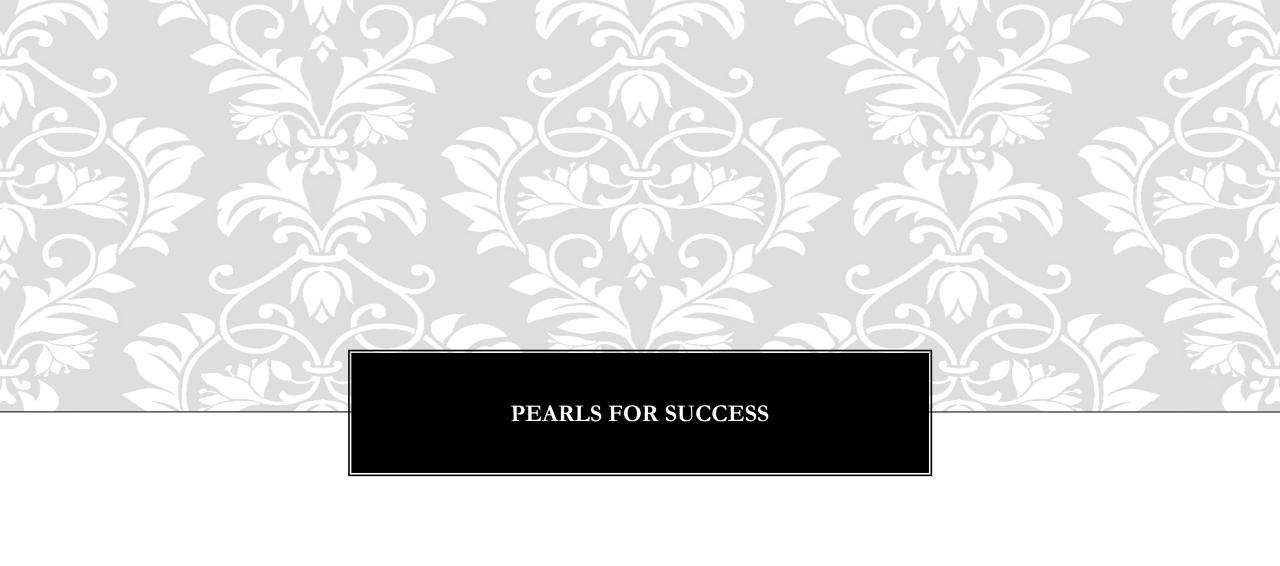
Mepitel

Restore

Restore Sliver







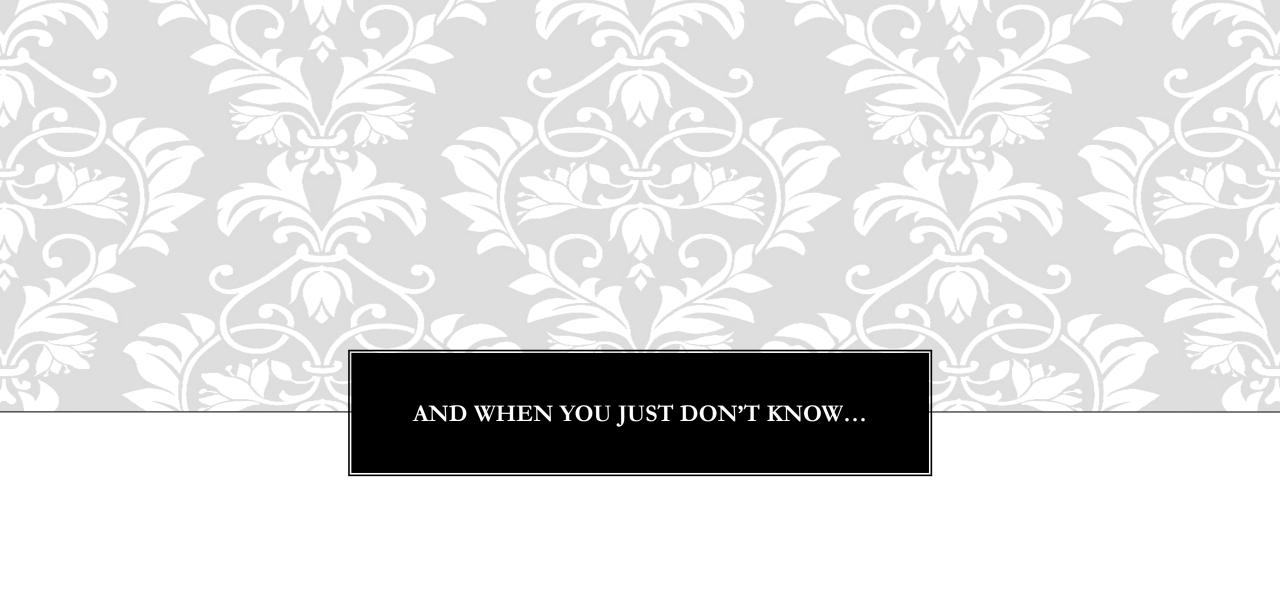
## TAKE HOME

There are many dressing and treatment choices available.

Keep it simple - it really is about moisture balance.

If unsure the safest option is to keep things dry.

Once etiology is determined care plan can be changed.



REMEMBER THE TEAM

WE ARE WILLING TO PUT IN ALL THE TIME AND EFFORT REQUIRED

SO WE CAN HELP YOU HELP YOUR PATIENT

IT TAKES A TEAM!

ANY QUESTIONS?