

# Wound Care: How do I know I'm Selecting the Right Treatment?

FMDA Annual Conference 2019

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## Objectives

- Describe the process of selecting a wound treatment
- Review, briefly, dressing categories and adjunct therapies
- Explain debridement options in the PA/LTC setting

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## QUESTION

I usually go with whatever (do not question) wound dressing recommendations I receive...whether it be from a wound nurse/internally, wound clinical/externally, the hospital, etc.

1. Agree
2. Disagree

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## QUESTION

I feel confident that I know exactly what the dressing that I ordered is going to do for the patient's wound.

1. 100% confident
2. 50% confident
3. No clue – isn't that the job of the wound nurse?

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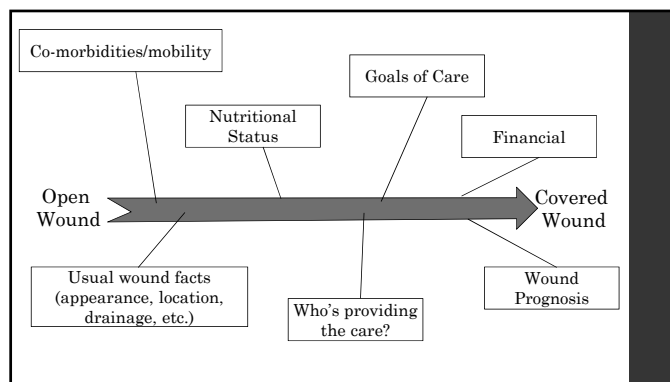
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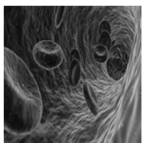
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## Co-morbidities



- PAD/PVD
- COPD
- CHF
- Diabetes
- Surgical procedures
- Dementia
- Neurological disease

## Mobility

- Walking
- Wheelchair
- Bedbound
- Dependent on others?



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## Nutritional Status

- No longer using albumin and pre-albumin as primary markers for nutritional status

- Malnutrition = use validated nutrition assessment tools

• Examples:

Mini Nutrition Assessment (MNA)

<http://mna-elderly.com/default.html>

Malnutrition Universal Screening Tool (MUST)

[http://www.bapen.org.uk/pdfs/must/must\\_full.pdf](http://www.bapen.org.uk/pdfs/must/must_full.pdf)

Langemo, et al., 2015: Immobility, skin moisture, and poor nutritional status = top 3 risk factors for pressure injuries in patients with advanced illness



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## Wound Prognosis

### Healable

- Can heal with proper wound management
- Can heal if underlying causes addressed
- Stable intrinsic factors

### Maintenance (healing potential but...)

- Use phrase "anticipate a delay"
- Patient/health system barriers compromising healing
- Patient nonadherent to treatment

### Nonhealable (palliative wounds)

- Use phrase "healing not expected, may even decline"
- Cannot heal due to irreversible causes/illnesses
- Critical ischemia; not treatable due to malignancy

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### Healable

- Patient has no terminal condition or major progressive illness
- Stable weights
- Adherent to treatment plan
- In line with patient's goals of care
- Goal is to heal the wound

### Maintenance

- Wound may improve but full closure would not be unexpected
- Chronic conditions and/or medications that delay wound healing
- Goals of care are to keep from worsening, minimize risk of infection, and pain management

### Nonhealable

- Patient has end-stage disease
- Poor nutritional intake
- Despite wound standards of care, does not improve
- Skin Failure (??)
- Goals of care: comfort, pain management, controlling odor

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## Palliative Wound Goals of Care

- H = hemorrhage
- O = odor control
- P = pain
- P = pruritus
- E = exudate management
- S = superficial infection
- S = stabilize the wound<sup>15</sup>
- P = prevent new wounds
- E = eliminate odor
- C = control pain
- I = infection prophylaxis
- A = absorbent wound dressings
- L = less/reduce dressing changes

Woo, 2017

Wendelken, 2009

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## Other Considerations



- Patient's goals of care
- Who is going to do the dressing change?
- Financially feasible
- Compliance/adherence to treatment

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## Wound Treatment Options

Finally, let's talk some dressings...AND adjunct therapies

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## General Principles



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## Basic Concepts

Wicks = used for tunnels	• Example: rope dressings
Fillers = wounds with depth or undermining	• Example: nonwoven gauze
Covers = required for all wounds	• Example: foam dressing
Hydrators = used for dry wounds	• Example: Hydrogel
Absorbers = use for wet wounds	• Foams, hydrofibers, calcium alginates

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## Gauze



- Nonwoven gauze
- Moistened prior to placement
- Limited absorptive capacity
- Not occlusive – does not protect against bacteria
- Cheap...or is it?

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## Films and Hydrocolloids

- Transparent Film
  - Porous adhesive layer that allows O<sub>2</sub> to pass through and moisture escape
  - Impermeable to external fluids/bacteria
  - Waterproof
- Hydrocolloid
  - Consists of gelatin, pectin, and carboxymethylcellulose
  - Impermeable to fluids/bacteria
  - Self-adherent

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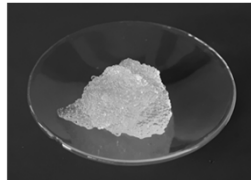
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## Hydrogel

- Water or glycerin-based
- Nonadherent
- Reduces wound pain
- Multiple forms



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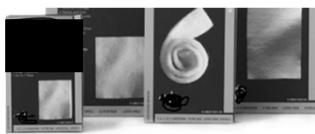
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## Calcium Alginates and Hydrofibers

- Nonwoven fibers from calcium-sodium alginate – from brown seaweed
- Similar ability of alginates expected made from carboxymethylcellulose
- Soft gel when in contact with wound exudate (odor)
- Absorptive
- Hemostatic properties for minor bleeding
- Absorptive



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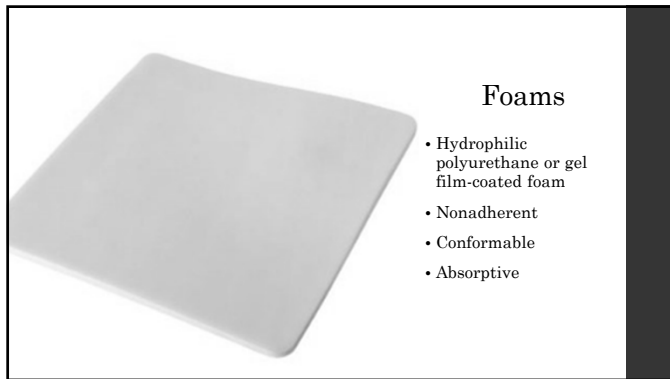
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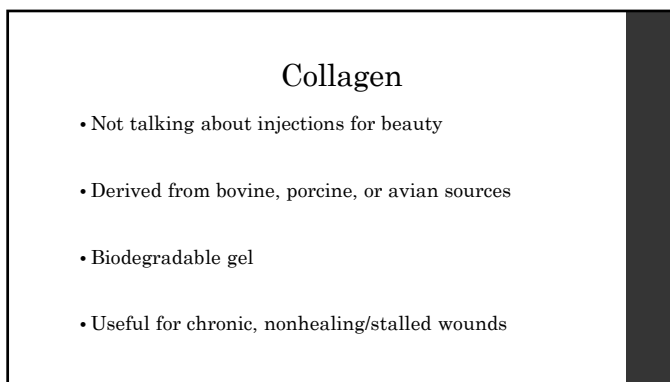
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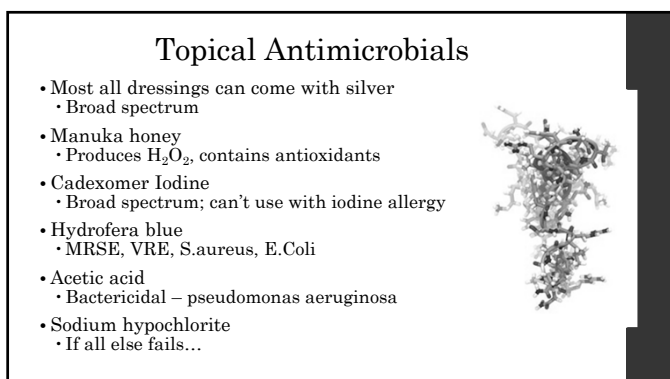
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## Advanced Wound Therapies

- Not typically used by a facility unless a wound specialist available
- Would not use without appropriate knowledge/training
- Types
  - Cellular and/or tissue-based products
  - Autologous platelet-rich plasma gel

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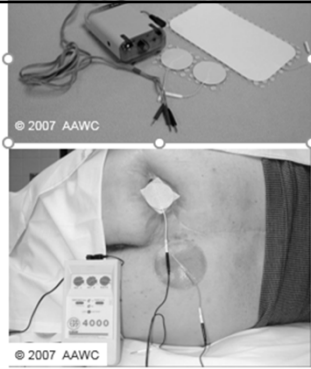
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**ESTIM**  
(Electrical stimulation)

- Helps increase circulation and stimulate tissue regeneration
- Contraindicated: cancer, severe PVD, PM/electronic implant, untreated osteomyelitis

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## Electromagnetic therapy

- Radiofrequency signal facilitates cellular and biological mechanisms associated with inflammation
- Adjunctive therapy for: Stage III/IV pressure injuries, diabetic, or vascular ulcer
- Increases circulation, decreases pain
- Contraindicated: metal implants, immature bones, PM, pregnancy, cancer

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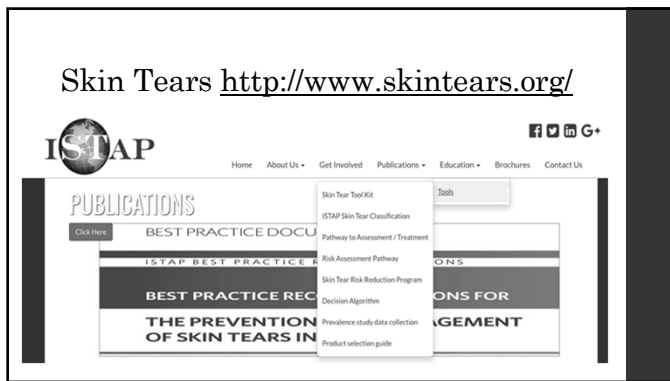
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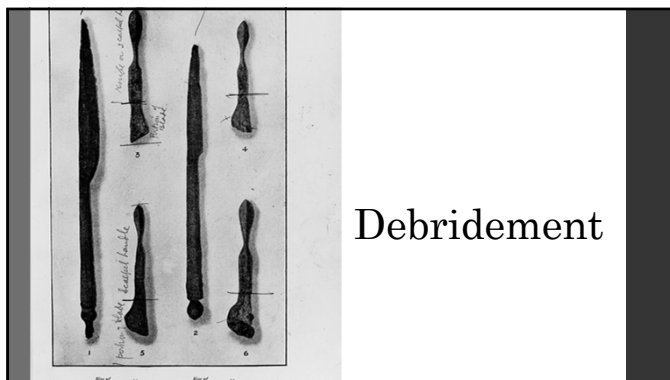
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**QUESTION**

Debridement should only be done if the wound has the capability to heal.

1. Agree
2. Disagree

Debridement should never be done for hospice patients

1. Agree
2. Disagree

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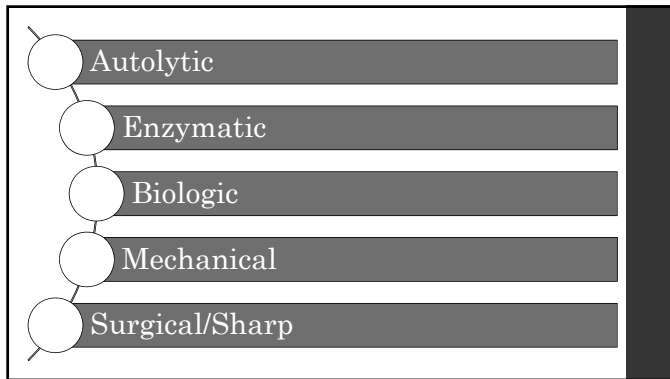
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### Surgical/Sharp

- Highly selective
- Rapid results
- Potentially very painful
- Beside or operating room
- Risk of hemorrhage/complications



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### Biologic

- Break down necrotic tissue and digest bacteria
- *Lucilia Sericata* – maggot larvae
- Selective debridement
- May cause psychological distress for the patient

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Autolytic	Enzymatic	Mechanical
<p>Endogenous enzymes present in wound fluid interact with moist dressing to soften and remove necrotic tissue</p> <p>--minor debridement method</p> <p>--healthy patient</p>	<p>Enzymes degrade and remove necrotic tissue</p> <p>-- costly and daily dressing changes</p> <p>-- do not use/mix with silver</p>	<p>Includes wet-to-dry dressings, hydrotherapy, and pulsed lavage</p> <p>--nonselective</p> <p>--painful</p> <p>-- not really done anymore</p>

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### Closed Pulsed lavage

- Indicated for wound cleansing
- And bioburden removal
- Contraindicated for bleeding d/o, uncontrolled pain, patients with sensory impairment



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### Ultrasound

- pulsed ultrasound
  - Increases O<sub>2</sub> perfusion;
  - stimulates NO for anti-microbial effect
- low frequency ultrasound
  - Wound debridement and cleaning



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## Conclusion

- Wound treatment is a balance of medicine and art
- Many treatments options out there – become comfortable with some and make them your “go-to’s”
- Anything new – read the package insert for contraindications
- Treat the WHOLE patient, not just the hole in the patient

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