

EDUCATION SERIES



DRESSING  
SELECTION



# WOUND

# ASSESSMENT

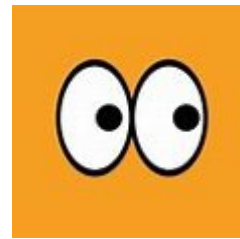
Accurate wound assessment is a prerequisite to planning appropriate care & should adopt a holistic approach

Assessment is enhanced by an understanding of:

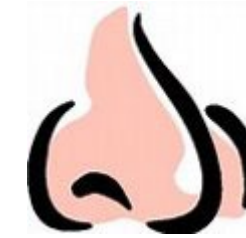
- Physiology of wound healing
- Factors that affect this process
- Optimal conditions required at the wound site

# ASSESSMENT TOOLS

Your Eyes...



Your nose...



Your Knowledge...



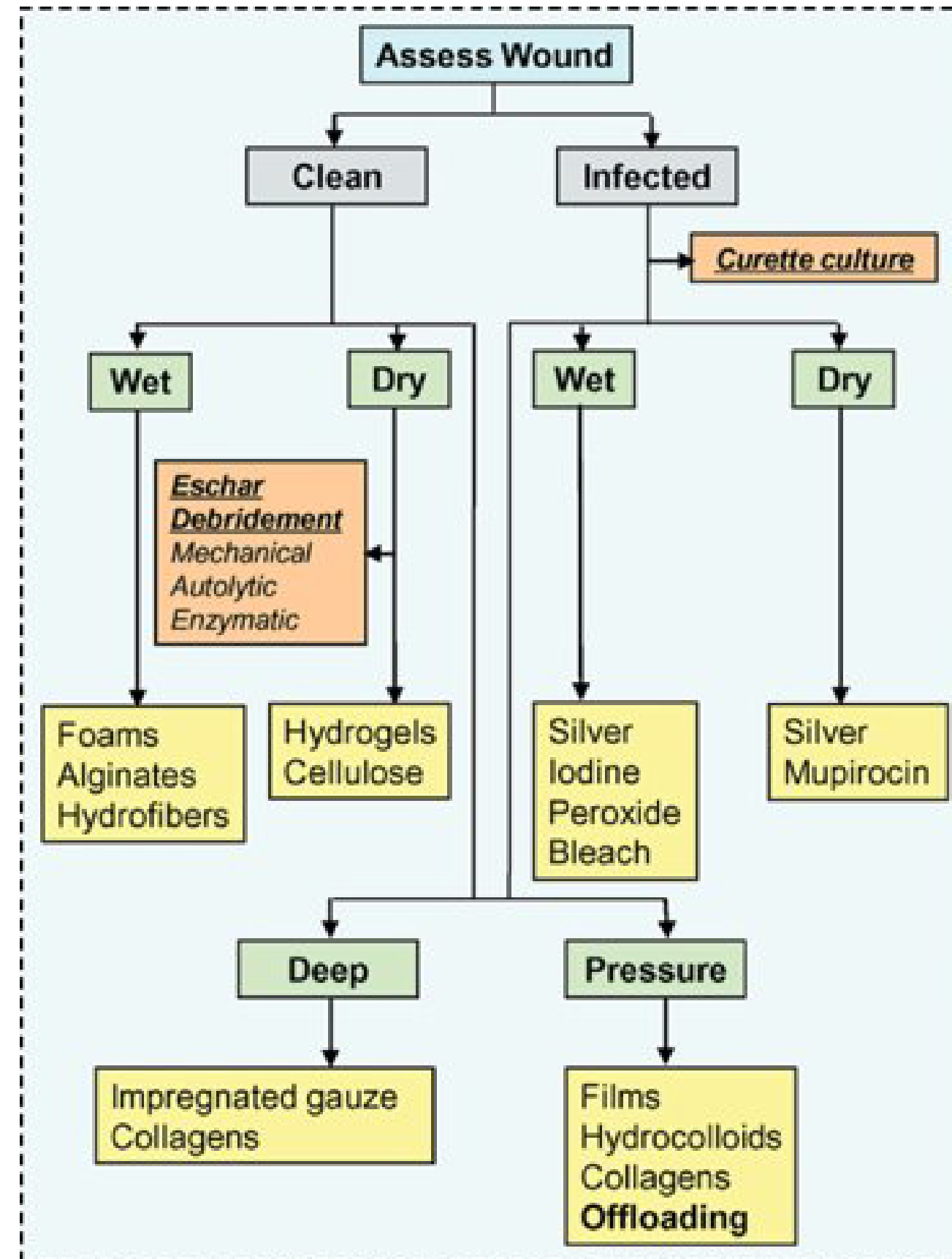
Your Ears...



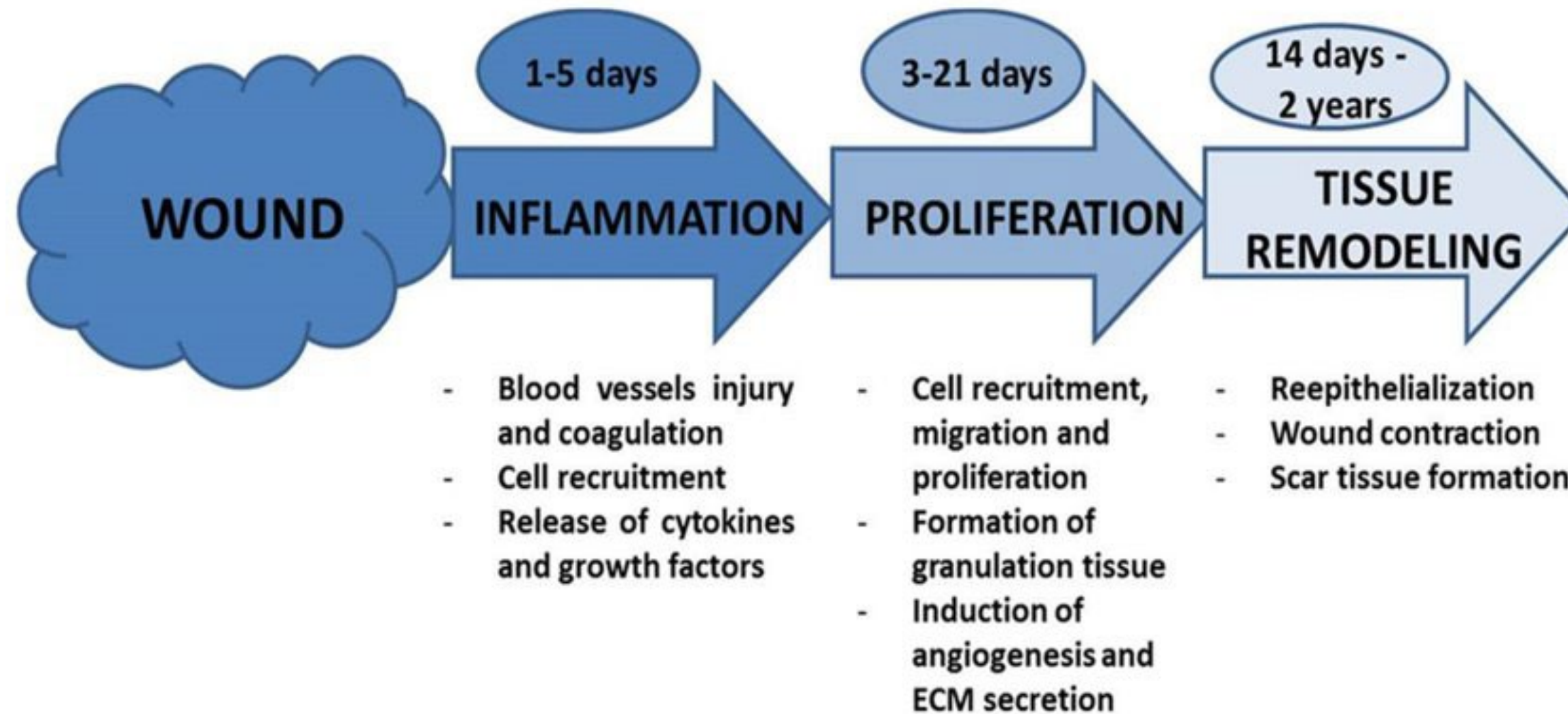
Your Mouth...



# WOUND ASSESSMENT PATHWAY



# KNOW THE STEPS OF WOUND HEALING





# KNOW THE TYPES OF DRAINAGE

Type	Appearance
A. Serous	Clear, watery plasma
	
B. Purulent	Thick, yellow, green, tan, or brown
	
C. Serosanguineous	Pale, red, watery: mixture of serous and sanguineous
	
D. Sanguineous	Bright red: indicates active bleeding
	



# WOUND TISSUE TYPES AND MANAGEMENT AIM

Tissue type	DESCRIPTION	Management aim
Necrotic	Dead layer, black or yellowish/brown, soft or hard, that may cover the wound or occur in patches.	To promote autolysis (liquification and breakdown by leucocytes) to allow safe removal.
Slough	Dead layer, viscous and yellow (or green/brown if infected), wet or dry on the surface.	To promote autolysis and remove the debris.
Granulating	Develops on a clean wound bed in the proliferative stage of healing. It is bright red and granular; unhealthy granulation tissue that looks dark (poorly oxygenated) and bleeds easily can indicate infection.	To promote angiogenesis and progression of healing, and avoid wound becoming necrotic or sloughy.
Overgranulation	Elevation of granulation tissue above the level of surrounding skin, preventing wound maturation.	To treat the cause (often excess of moisture), manage exudate effectively, promote epithelialisation over the surface of the wound, and provide a comfortable dressing.
Epithelialising	Pink/translucent, very fragile, and needs to be kept moist.	To protect and promote the new tissue growth.



# HOW DO I CHOOSE A DRESSING?

Ask 'what do I want the dressing to do?'

- ▶ Re-hydrate?
- ▶ Absorb exudate?
- ▶ De-slough?
- ▶ Reduce bacterial contamination?
- ▶ Promote granulation?
- ▶ Promote a moist / dry wound bed?





# DRESSING GOAL

Purpose	Suggested dressing	Dressing type
Absorb exudate	<ul style="list-style-type: none"> <li>▪ Absorption beads</li> <li>▪ Pastes, powders, and pads                             <ul style="list-style-type: none"> <li>• Alginates*</li> <li>• Foams*</li> <li>• Hydrocolloids</li> <li>• Hydrogels</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>▪ Calcium Alginate pads or ropes</li> <li>▪ Foams</li> <li>▪ Hydrogel impregnated sponge</li> <li>▪ Hydrogel pads</li> </ul>
Autolytic debridement	<ul style="list-style-type: none"> <li>▪ Pastes, powers, and pads                             <ul style="list-style-type: none"> <li>• Alginates*</li> <li>• Foams*</li> <li>• Hydrocolloids*</li> <li>• Hydrogels*</li> <li>• Transparent films</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>▪ Calcium Alginate pads or ropes</li> <li>▪ Hydrasorb Foam</li> <li>▪ Hydrogel impregnated sponge</li> <li>▪ Hydrogel pads</li> <li>▪ Tegaderm transparent film (without pad)</li> </ul>
Maintain moist wound environment	<ul style="list-style-type: none"> <li>▪ Foam</li> <li>▪ Hydrocolloids</li> <li>▪ Hydrogels</li> <li>▪ Transparent films</li> </ul>	<ul style="list-style-type: none"> <li>▪ Calcium Alginate pads or ropes</li> <li>▪ Hydrasorb Foam</li> <li>▪ Hydrogel impregnate sponge</li> <li>▪ Hydrogel pads</li> <li>▪ Tegaderm transparent film (without pad)</li> </ul>
Fill dead space	<ul style="list-style-type: none"> <li>▪ Alginates</li> <li>▪ Hydrocolloid</li> <li>▪ Hydrogel</li> <li>▪ Foam</li> </ul>	<ul style="list-style-type: none"> <li>▪ Calcium Alginate pads or ropes</li> <li>▪ Hydrasorb Foam</li> <li>▪ Hydrogel impregnated sponge</li> <li>▪ Hydrogel pads</li> </ul>



# EXAMPLES OF STANDARD

# DRESSINGS FOR WOUND

# MANAGEMENT

## Standard Dressings

What is the exudate management goal?

### Absorb

When there is a lot of moisture, dressings which absorb excess moisture and protect against maceration. Acute minor burns <72 hours, usually have a lot of exudate.

**Foams:** Allevyn Gentle Border; Allevyn Life; Woundaid Foam; Mepilex; Mepilex Border; Mepilex XT  
**Alginates:** AlginateM; Melgisorb Ag; Kaltostat;  
**Other:** Aquacel; Parrafin gauze with adequate secondary dressings

### Balance

For lightly exuding wounds, balance dressings maintain a moist wound environment, providing protection and insulation to a healing wound.

**Silicone:** Mepitel; Mepitel One; Mepilex Transfer  
**Non Stick Dressings:** Jelonet, Atrauman, Cuticerin  
**Hydrocolloids (for autolytic debridement):** Replicare; Wound Aid Hydrocolloid; Comfeel; Duoderm

### Hydrate

Hydrating dressings donate moisture to the wound. These dressings are useful for dry wounds, assist with the removal of nonviable tissue and some can be soothing.

**Cream Gels (require secondary dressings):** Solusite; Intrasite; Normigel; Solugel  
**Sheet gels (soothing, especially for epidermal burns):** Burn Aid, Water Jel

# FACTORS INFLUENCING SELECTION

## Bacterial Profile

## Wound Characteristics

- ▶ Dry
- ▶ Moist
- ▶ Heavily Exuding
- ▶ Malodorous
- ▶ Excessively Painful
- ▶ Difficult to Dress
- ▶ Liable to Bleed Easily

## Wound type

- ▶ Depth
- ▶ etiology/cause

## Stage of healing

- ▶ Tissue type
- ▶ Necrotic
- ▶ Sloughy
- ▶ Granulating
- ▶ Epithelializing



# PRODUCT FACTORS

- ▶ Conformability
- ▶ Mass or volume
- ▶ Fluid handling properties
- ▶ Sensitization
- ▶ Odor absorbing properties
- ▶ Ease of application & removal
- ▶ Antibacterial activity
- ▶ Hemostatic properties
- ▶ Ease of use
- ▶ Permeability
- ▶ Microclimate impact



# REMEMBER: OPTIMIZE THE WOUND



## TOO WET

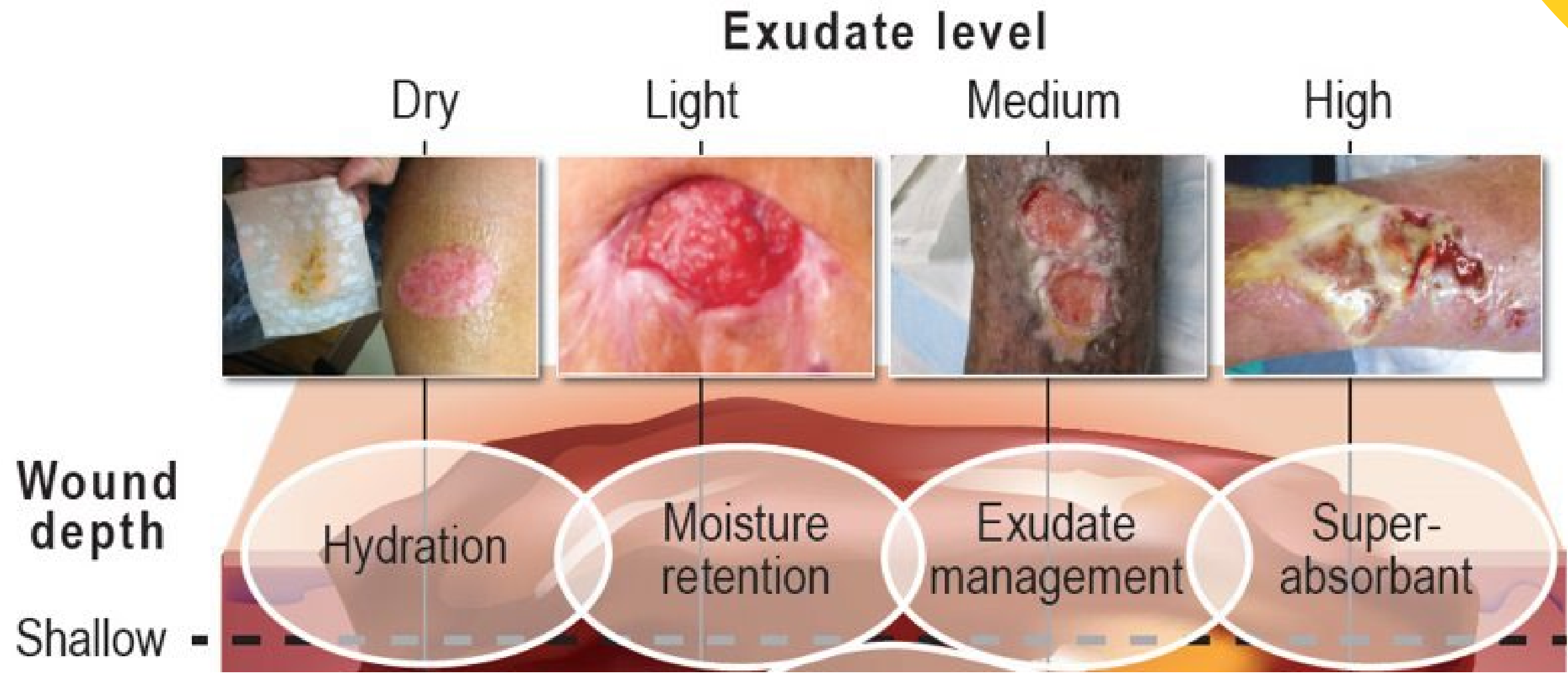
- ▶ Remove moisture
- ▶ Absorption / Retention / Sequestration
- ▶ Debridement
- ▶ Treat infection

## TOO DRY

- ▶ Add moisture







# WOUND PACKING

Dead space must be filled with dressing material to ensure that wound closure is delayed until the space has been replaced with granulation tissue:

- ▶ Cavity
- ▶ Undermined tissue
- ▶ Tracts
- ❖ Make sure you can get it out in one piece and/or that it is noted how many pieces are packed inside so nothing is left behind.



# REMEMBER:

If there's no blood supply,  
keep it dry...

...unless you are 100% sure there is viable tissue underneath, or you have been advised by a tissue viability specialist or responsible Physician.



# TYPES OF DRESSINGS

- ▶ Hydrogels
- ▶ Alginates
- ▶ Gelling fibers
- ▶ Hydrocolloid
- ▶ Foam
- ▶ Non adherent wound contact layers
- ▶ Island dressings
- ▶ Antimicrobial
- ▶ Odor controlling
- ▶ Other...TNP or NPWT, maggots, cellular matrix & protease modulators

Dressing Type	Dressing products
Hydrofibres	Aquacel
Alginates	Sorbsan
Foam Dressings	Allevyn Allevyn Cavity Allevyn Heel
Specialist Foam	Mepilex
Hydrogels	Aquaform
Hydrocolloids	DuoDERM Extra Thin Granuflex
Non/Low Adherence Dressings and wound contact materials	Atrauman Mepore Mepitel N-A Ultra
Film Dressing	Tegaderm Film
Skin Protector	Cavilon Film & Cream
Anti Microbial Dressings & topical preparations	Inadine Iodoflex paste Metronidazole gel 0.75%
Silver Dressings & topical preparations	Aquacel Ag Actisorb Silver 220 Flamazine
Odour Absorbent dressings	CarboFLEX
Haemostatic Dressings	Kaltostat
Specialised Dressings	Promogran Honey: Activon, Algivon (alginate) Contreet Foam (Biatain Ag) LarvE Vacutex Topical negative pressure VAC therapy



# HYDRO GELS

## Properties:

- ❑ come in sheets & gel
- ❑ high water content facilitates debridement by rehydration

## Wound Types:

- ❑ sheets are used for shallow wounds & cavity edges
- ❑ gels are suitable for cavities

## How to use, when to change:

- ❑ change dressing every 1 to 3 days
- ❑ apply directly into/onto wound & cover

## Contradictions:

- ❑ heavily exuding wounds
- ❑ Maceration & excoriation of the peri-wound area
- ❑ infected wounds





# ALGINATES

## Properties:

- absorbent dressings, the main purpose of which is hemostasis
- forms a gel which conforms to shape of the wound
- made from seaweed

## Wound types:

- moderate to heavily exuding wounds of all types

## How to use, when to change:

- remove by irrigating
- change dressing every 2 to 7 days.
- use secondary dressing

## Contradictions:

- dry wounds
- necrotic wounds



# HYDROCOLLOIDS

## Properties:

- ❑ occlusive moist environment, waterproof, can adhere to wet sites

## Wound types:

- ❑ clean, granulating or necrotic wounds with low to moderate exudate
- ❑ primary dressing for epithelizing wounds

## How to use, when to change

- ❑ change every 3 to 7 days (warm to make more pliable & adhesive)
- ❑ requires 1.5 to 2cm margin
- ❑ warn patient about characteristic odor to expect when hydrocolloid mixes with exudates

## Contraindications:

- ❑ heavily exuding wounds & infected wounds



# OCCCLUSIVE DRESSING

▶ Definition: A type of wound dressing that totally covers the wound bed, sealing it off from the environment. It is impermeable or semi-impermeable to moisture (HCD or Film)

- ❑ Promote a moist wound environment
- ❑ Stimulates angiogenesis through providing a hypoxic environment
- ❑ Reduction in frequency of dressing changes
- ❑ Facilitation of fibrinolysis
- ❑ Promotion of autolysis
- ❑ Promotion of angiogenesis
- ❑ Protection



# FOAMS

## Properties:

- ❑ Absorbent dressings, primary & secondary

## Wound types:

- ❑ light to heavily exuding wounds

## Contraindications:

- ❑ very dry sloughy or necrotic wounds
- ❑ may cause peri-wound maceration in highly exuding wounds

## How to use, when to change:

- ❑ exudate is absorbed into the foam & becomes visible at the dressing edges, once saturated
- ❑ use secondary dressing, such as tape or appropriate bandage, if product does not have an adhesive border
- ❑ do not cover with occlusive film, this may affect the vapor permeability of the dressing



# GELLING FIBERS

## Properties

- ❑ composed of hydrocolloid fibers. Sodium carboxymethylcellulose spun into a fiber that forms a gel in contact with wound exudate
- ❑ allows for the absorption & retention of exudates

## Wound types:

- ❑ Indicated as primary dressing for management of medium to highly exuding wounds
- ❑ may be useful for infected wounds as “holds” bacteria

## How to use, when to change:

- ❑ apply directly to the wound
- ❑ requires at least 1cm margin overlapping surrounding skin to ensure adhesion/reduce leakage/seal wound borders
- ❑ requires a secondary dressing –some are built in

## Contraindications:

- ❑ Light exuding wounds





# FILMS

## Properties:

- ❑ High moisture vapor transmission
- ❑ used as a primary and secondary dressing

## Wound type:

- ❑ low exuding wounds, as they do not absorb exudate
- ❑ suitable for relatively shallow wounds, e.g. dermabrasion, burns and donor sites retention dressings, e.g. for cannulas

## How to use, when to change:

- ❑ frequency of change depends on the nature of the wound
- ❑ skin surrounding wound must be clean and dry

## Contraindications:

- ❑ excessive exudate may accumulate under dressing
- ❑ may cause adhesive trauma on removal



# ISLAND DRESSINGS

## Properties:

- primary dressing on dry or lightly exuding wounds
- Barrier and non barrier available

## Wound types:

- Postop, low exudate

## How to use, when to change:

- PRN - depends on wound and protocols postop

## Contraindications:

- Moderate to highly exuding wounds



# CADEXOMER IODINE

## Properties:

- ❑ cadexomer iodine paste, red-brown in color starch microbeads, iodine trapped in 3D lattice

## Wound types:

- ❑ exuding wounds
- ❑ infected, sloughy wounds

## How to use, when to change:

- ❑ apply directly to skin allowing a small margin of overlap onto surrounding skin
- ❑ changing is indicated by loss of color in the product

## Contraindications & considerations:

- ❑ there are maximum doses/application per week
- ❑ each single course of treatment should not last for more than 3 months.

## Contraindicated

- ❑ in people with thyroid problems, lithium, pregnancy



# HONEY

## Properties:

- low concentrations of hydrogen peroxide
- High sugar content draws lymph fluid from beneath the wounds surface.
- debrides slough, rehydrates necrosis

## Wound types:

- infected or critically colonized indolent/non-healing wounds

## How to use, when to change:

- apply directly to wound
- should be changed when saturated with exudate
- dressings can be cut

## Contraindications & considerations:

- Monitor glucose levels of patients with diabetes, pain



# SILVER

## Properties:

- ❑ antibacterial properties through silver ions interference with bacterial electron transport binding to DNA of bacteria and their spores, so impairing cell replication
- ❑ cell membrane interaction – structural and receptor function damage

## Wound Types:

- ❑ Infected or critically colonized indolent/non-healing wounds

## How to use, when to change:

- ❑ All very different so pay attention

## Contraindications & considerations:

- ❑ may give skin a general grey discoloration (argyria) – largely a cosmetic problem. Only occurs with long term use





# PHMB – Polyhexamethylene Biguanide

## Properties:

- ❑ Antibacterial properties through silver ions
- ❑ Binds to cell membrane causing holes to form, the cells leak, collapse and die
- ❑ Often impregnated into foam or gauze or as a liquid or gel

## Wound Types:

- ❑ Infected or critically colonized indolent/non healing wounds

## How to use, when to change:

- ▶ All very different – pay attention

## Contraindications & considerations:

- ❑ Different for each product



# WOUND CONTACT LAYERS

## Properties:

- primary dressing on dry or lightly exuding wounds
- secondary dressing required
- most are low adherent

## Wound types:

- Especially suited to epithelizing wounds

## How to use, when to change:

- Apply directly to wound bed

## Contraindications:

- Moderate to highly exudating wounds



# ODOR REDUCING CHARCOALS

## Properties:

- utilizes charcoal to absorb odor particles
- usually require to stay dry

## Wound types:

- Malodorous

## How to use, when to change:

- All very different - pay attention

## Contraindications & considerations:

- consider client changing it themselves



<b>DRESSING SELECTION BY WOUND DEPTH</b>			
<b>INTACT SKIN</b> <b>STAGE 1 PRESSURE INJURY</b> <b>SUSPECTED DEEP TISSUE</b> <b>INJURY</b>	<b>PARTIAL THICKNESS</b> <b>BLISTER, SCAB</b> <b>STAGE 2 PRESSURE INJURY</b> <b>MOISTURE-ASSOCIATED</b> <b>SKIN DAMAGE</b>	<b>FULL THICKNESS</b> <b>STAGE 3 PRESSURE INJURY</b> <b>STAGE 4 PRESSURE INJURY</b> <b>SUSPECTED DEEP TISSUE</b> <b>INJURY</b>	<b>UNSTAGEABLE PRESSURE</b> <b>INJURY</b> <b>SLOUGH</b> <b>ESCHAR</b>
<b>PRIMARY DRESSING</b>			
BARRIER	HYDROGEL (PLAIN, SILVER)	COLLAGEN	ENZYMATIC DEBRIDEMENT
SKIN PREP	COLLAGEN (PLAIN, SILVER)	ALGINATE (CALCIUM, SILVER, HONEY)	HYDROGEL (PLAIN, SILVER)
TRANSPARENT	HYDROCOLLOID	BACTERIOSTATIC FOAM	ALGINATE (CALCIUM, SILVER, HONEY)
PAD AND PROTECT/GAUZE	HONEY GEL	HONEY GEL	HONEY GEL
<b>SECONDARY DRESSING</b>			
***Follow CMS guidelines for reimbursement.	TRANSPARENT GAUZE COMPOSITE	GAUZE FOAM SUPER ABSORBENT	GAUZE FOAM SUPER ABSORBENT



# Dressings for Debridement



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800-397-6888



# THERE ARE MANY DRESSINGS & TREATMENTS

## AVAILABLE, REMEMBER...

- ▶ Work within your formulary/availability as 1st line treatment-they are cost effective & evidence based
- ▶ As the clinician you must be clear what desired outcomes are required for each client before commencing dressing selection
- ▶ Treatment choice should be based on the clear understanding of the benefits & limitations of each product





KEEP IT SIMPLE, IT'S ABOUT MOISTURE BALANCE.

USE THE SCALE.

- ▶ Know your products, talk to the companies, otherwise its clinical risk
- ▶ Assessment is key!!!!
- ▶ You can find additional information in the SerenaGroup Outpatient Wound Care Policies and Procedures.



# QUESTION

## TRUE OR FALSE?

THE 5 WOUND ASSESSMENT TOOLS YOU HAVE ARE?

1. Nose
2. Mouth
3. Your Knowledge
4. Eyes
5. Ears

# ANSWER

TRUE!

THE 5 WOUND ASSESSMENT TOOLS YOU HAVE ARE

1. Nose
2. Mouth
3. Your Knowledge
4. Eyes
5. Ears

# QUESTION

## TRUE OR FALSE?

You should always keep wounds that do not have blood supply moist.

# ANSWER

**FALSE!**

If there's no blood supply –  
keep it dry.

# QUESTION

## FILL IN THE BLANK

Foam Dressings may cause peri-wound \_\_\_\_\_ in highly exuding wounds.

# ANSWER

Foam Dressings may cause peri-wound maceration in highly exuding wounds.



# THANK YOU

## CONTACT US

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