Appropriate Dressing Selection For Treating Wounds

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Criteria to Consider for an Ideal Dressing

- **Exudate Management** - Be able to provide for moist wound healing by absorbing exudate or adding moisture
- **Secure Application** - Remain securely in place during all activities
- **Easy Removal** - Able to be removed without traumatizing the wound bed or surrounding tissue
- **Extended Wear Time** -Allow for minimal dressing changes to diminish disturbance of the healing process and decrease nursing time required
- **Cost Effectiveness** - Lower dressing and nursing costs
- **Comfort** - Allow for patient comfort and provide good quality of life

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Moist Wound Healing – A Standard of Care

- Research has shown that **maintaining a moist wound environment facilitates the wound healing process**. The beneficial effects of a moist versus a dry wound environment include:
    - Prevention of tissue dehydration and cell death
    - Accelerated angiogenesis (allowing cells to migrate across the wound surface)
    - Increased breakdown of dead tissue and fibrin
    - Increasing the interaction of growth factors
    - Pain is significantly reduced

- Circumstances where moist wound healing may be contraindicated include intact, dry eschar to the heel or dry necrosis to the foot/toes related to poor vascular perfusion.

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Wound Management Algorithm

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Assess Resident Condition → **1. Review Clinical Test Results** → **2. Nutritional Status** → **3. Support Surface & Pressure Relief** → **4. Assess Wound & Drainage** → **5. Identify Underlying Cause**

A. Light Exudate	B. Moderate Exudate	C. Heavy Exudate	Additional Wound Info
Cleanse with: **Gentell** Wound Cleanser **Hydrate Wound Bed** **Apply to the wound bed:** **Gentell** Hydrogel Tube or Hydrogel Saturated Gauze Dressing *OR* **Gentell** Collagen Dressing or Collagen Particles **Cover with:** **Gentell** Bordered Gauze Dressing *ALTERNATIVE:* Cover with **Gentell** Dermatell Hydrocolloid*(change every 3 to 5 days)	**Cleanse with:** **Gentell** Wound Cleanser **Absorb & Contain Exudate** **Apply to the wound bed:** **Gentell** Calcium Alginate Dressing, **Gentell** Collagen Dressing, Collagen Particles or **Gentell** CMC Fiber Dressing **Cover with:** **Gentell** Super Absorbent Dressing *OR* **Gentell** Foam Dressing *OR* **Gentell** Silicone Foam Dressing *OR* **Gentell** Waterproof Foam Dressing *OR* **Gentell** Comfortell Dressing	**Cleanse with:** **Gentell** Wound Cleanser **Absorb & Contain Exudate** **Apply to the wound bed:** **Gentell** Calcium Alginate Dressing *OR* **Gentell** CMC Fiber Dressing **Cover with:** **Gentell** Super Absorbent Dressing *OR* **Gentell** Foam Dressing *OR* **Gentell** Silicone Foam Dressing *OR* **Gentell** Waterproof Foam Dressing	**1. Select Appropriate Debridement:** • Surgical • Chemical • Autolytic • Mechanical • Sharp **2. Assess Surrounding Skin:** • Moisturize • Protect from Incontinence • Control Edema **3. Wound Environment:** • Contain Exudate • Fill Bed Space • Protect & Insulate

Infected/Colonized Wounds:
Apply Calcium Alginate Ag (Silver), or Honey Products
*If wound is infected, do not use occlusive dressings such as Hydrocolloids.

Clinical Assessment

The type, or category, of dressing chosen will be dependent upon several clinical assessments made about the wound, including:

- Size, depth, and the presence, location and extent of undermining or tunneling/sinus tract
- Exudate observed including type, color, amount, odor
- Pain, if any
- Wound bed and type of tissue noted (granulation, slough, eschar, etc.)
- Condition of wound edges and peri-wound (rolled edges, erythema, induration, maceration)

Dressing Categories

- Most dressings can be divided into **Primary** dressings and **Secondary** dressings. Primary dressings are applied directly to the wound surface, while Secondary dressings are used as a covering. *Both have important functions in promoting wound healing.*

Primary Dressings

- Collagen
- Hydrogels
- Alginates and Gelling Fibers
- Super Absorptive Dressings
- XeroForm, Petrolatum and Oil Emulsion Gauzes

Secondary Dressings

- Foams
- Hydrocolloids
- Composites
- Gauzes
- Transparent Films

Collagen Dressings

Description:

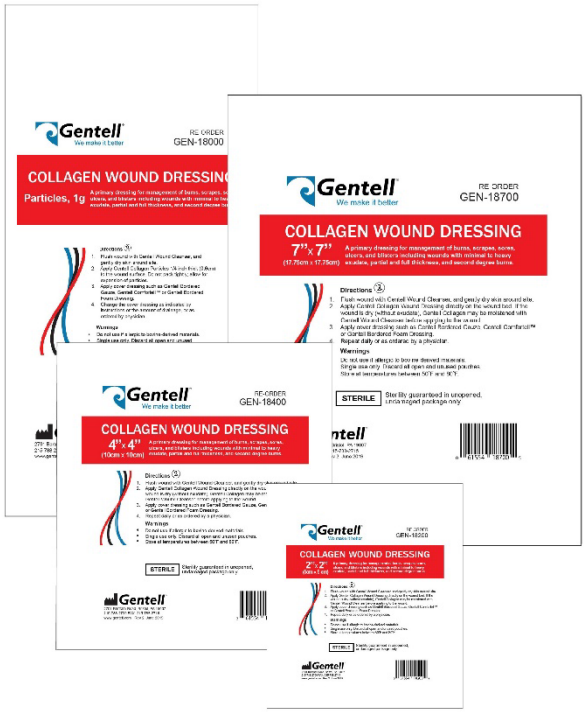
Used as a primary dressing, collagen stimulates the growth of new granulation tissue. It supports hemostasis, wound debridement, angiogenesis, fibroblast activity, re-epithelialization and wound remodeling. Requires a secondary dressing.

Indications:

- For use on partial and full thickness wounds or any stage pressure ulcer with minimal to heavy drainage
- May be used in infected wounds
- Conforms to any wound shape
- Helps maintain a moist wound environment
- Available in sheets or as particles
- May be used with hydrogels, Santyl

Disadvantages:

- Not indicated for wounds with 100% dry slough or eschar



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Collagen Dressings

Types of wounds appropriate for use of a Collagen Dressing

Any and all wounds *(except with dry eschar/slough)*

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Hydrogel Dressings

Description:
Semipermeable hydrophilic polymers composed primarily of water or glycerin; available in gel or impregnated gauze form to add moisture to dry wound beds. Requires a secondary dressing.

Indications:
- Supports autolytic debridement
- Maintain moist wound surface
- Pain relief in radiation damaged tissue and superficial burns
- Dressing change frequency is usually once a day

Disadvantages:
- Not indicated for heavily draining wounds
- May contribute to peri-wound maceration
- Not indicated for management of chickenpox, shingles lesions or 3rd degree burns.

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Hydrogel Dressings

Types of wounds appropriate for use of a Hydrogel Dressing

By adding moisture to this wound it will assist in autolytic debridement and help decrease the amount of necrotic tissue

Exposed tendons require moisture to keep the sheath intact and prevent drying and death of the tendon

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Alginates and Gelling Fibers

Description:

Non-woven mass of gelling fibers that forms a moisture retentive gel on contact with wound fluid; non occlusive, available as rope or flat dressings. Excellent for absorption of wound drainage as it absorbs up to 20 times its weight in fluid. Calcium Alginate also comes with Silver. Requires a secondary dressing.

Indications:

- Full thickness wounds/Stage 3 and 4 with moderate to heavy exudate
- Autolytic debridement of yellow slough in deep wounds with uneven wound beds
- Odor control
- May be used on infected wounds (silver)
- Facilitates autolytic debridement
- Also comes impregnated with honey
- Dressing change frequency is usually once a day

Disadvantages:

- Not recommended for wounds with light exudate or dry eschar
- If wound bed is dry, the dressing will not form a gel and may adhere to granulation tissue causing trauma

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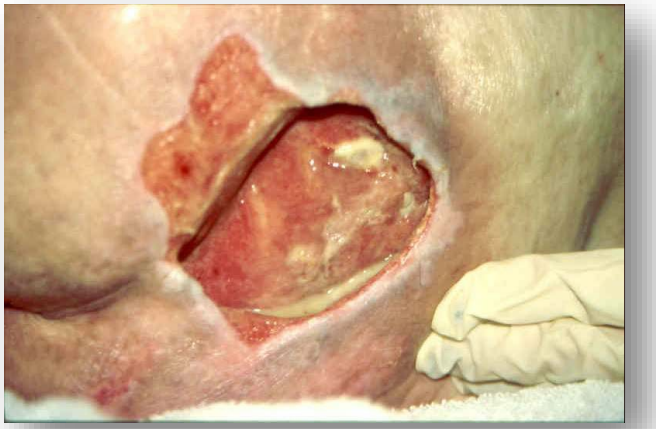
Alginates and Gelling Fibers

Types of wounds appropriate for use of Calcium Alginates

Infected post ilio-fem bypass graft



Stage 4 sacral pressure injury with heavy exudate (note thick exudate when undermining area pressed)

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Impregnated Gauze

Description:

A series of fine-mesh impregnated gauzes ideal for lightly exuding wound, minor burns, lacerations and abrasions. Latex-free and non-adherent. Available options include gauzes impregnated with 3% Bismuth Tribromophenate, petrolatum, or a mineral oil blend.

Indications:

- For use on lightly draining wounds, minor burns, lacerations, and abrasions
- XeroForm and Oil Emulsion Dressings can also be used on skin graft sites and sutured wounds

Disadvantages:

- Oil Emulsion Dressing is not for use on third degree burns
- XeroForm Dressing should not be used on patients with a known sensitivity to Bismuth Tribromophenate

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Impregnated Gauze

Types of wounds appropriate for use of an Impregnated Gauzes

Abrasions

Sutures

Minor Burns

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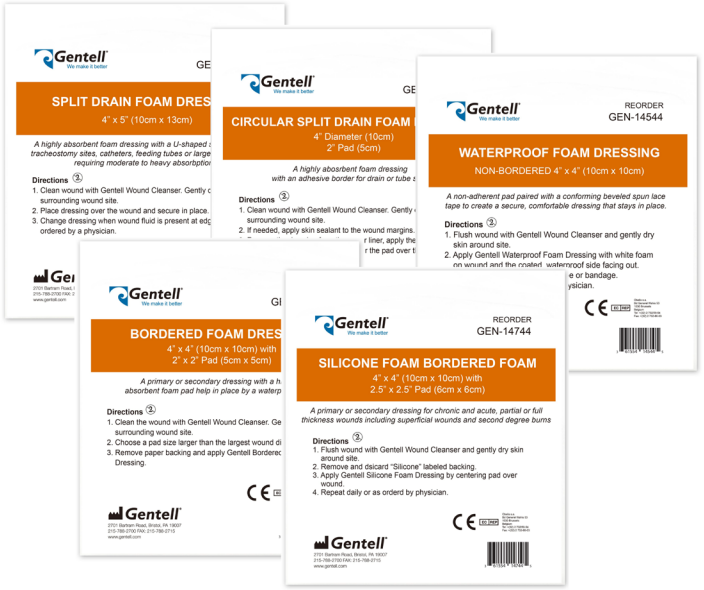
Foam Dressings

Description:

Mainly made from polyurethane, foams provide an appropriate, moist environment that will prevent cells from dying and promote cell migration across granulation tissue. They come as bordered, non bordered or with silicone adhesive throughout. They insulate the wound bed to promote an optimal temperature for healing and are very effective with painful wounds.

Indications:

- Full thickness wounds/Stage 3 and 4 with moderate to heavy drainage
- Autolytic debridement of yellow slough with uneven wound beds
- May be used on infected wounds
- Change QOD to q 3 days depending on drainage amount
- Can be used as a primary or secondary dressing



Disadvantages:

- Should not be used on wounds with light drainage
- Not indicated for 3rd degree burns
- Not for wounds with dry eschar

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Foam Dressings

Types of wounds appropriate for use of a Foam Dressing

Mixed vascular wound to lower leg

Very painful wound to lower leg

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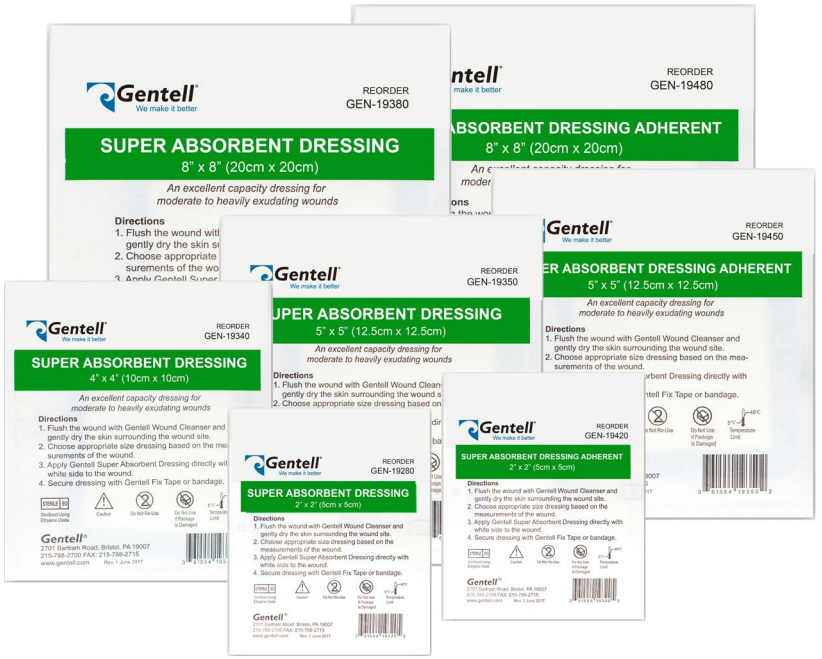
Super Absorbent Dressings

Description:
Composed of a breathable, waterproof non-woven backing, a super absorbent pad, and a hydro-penetrating non-woven contact layer. Offers excellent absorbent capacity and absorbs up to 40 times its weight in exudate. Available in an adherent version with a gentle silicone contact layer.

Indications:
- Excellent for the treatment of moderate or heavy exuding wounds
- Ideal for leg ulcers, pressure ulcers, non-infected diabetic foot ulcers, dehisced surgical wounds, and donor sites
- Can be used as a primary or secondary dressing

Disadvantages:
- Should not be used on wounds with no or light drainage
- Not for use in wound cavities due to swelling during absorption
- Do not use on third degree burns



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Super Absorbent Dressings

Types of wounds appropriate for use of a Specialty Absorbent Dressing

Dehisced Surgical Wound

Moderate to Heavy Exuding Wound

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Hydrocolloid Dressings

Description:

Occlusive wafer dressing, containing hydrophilic colloidal particles (pectin, gelatin, elastomers) in an adhesive compound laminated onto a flexible water resistant outer layer. Also comes as pastes or powders as used with ostomies.

Indications:

- Autolytic debridement of light to moderate amount of slough/necrosis
- Prevents secondary infection from contamination
- Maintains moist wound surface
- Provides limited absorption
- Change every 2-3 days

Disadvantages:

- Occlusive properties can promote wound infection in high risk patients (anaerobic infection)
- May dislodge with shearing or friction
- Dislodges with heavy exudates
- May tear fragile surrounding skin when removed
- Unpleasant odor upon removal

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Hydrocolloid Dressings

Types of wounds appropriate for use of a Hydrocolloid Dressing

Partial thickness skin loss on the buttocks secondary to friction/shear/moisture. Hydrocolloid can remain intact for several days.

Scattered areas of partial and full thickness wounds can be covered with hydrocolloids and left in place for 3-5 days depending on exudate amounts.

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Composite Dressings

Description:

Composite wound dressings are comprised of multiple layers and incorporate a semi- or non-adherent pad that covers the wound, absorptive layers that can manage exudate, and an outer layer that is waterproof thus providing a barrier to bacteria and other contaminants. Each layer of the dressing is physiologically distinct in its function to aid in wound healing. Can be used as a primary or secondary dressing.

Indications:

- For use on partial or full thickness or any stage wounds with none to light exudate
- Promotes autolytic debridement
- Safe to use with infected wounds

Disadvantages:

- Requires healthy, intact peri-wound skin

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Composite Dressings

Types of wounds appropriate for use of a Composite Dressing

Lateral lower leg wound used as a primary dressing to absorb drainage and prevent adherence to wound bed

Vascular leg wound used as a secondary dressing with an enzymatic debrider

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Gauze Dressings

Description:

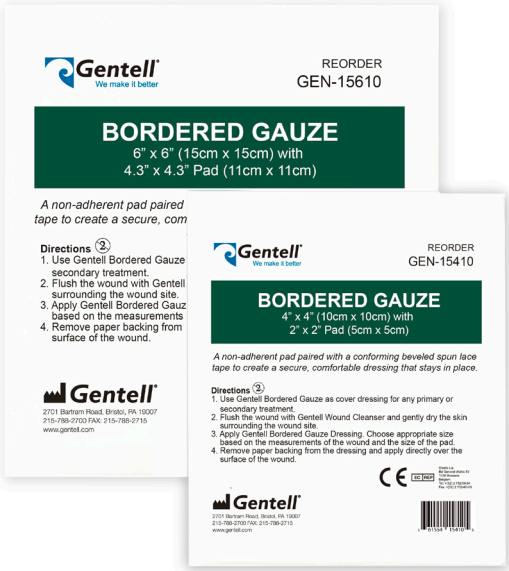
Gauze wound dressings are comprised of multiple layers and incorporate a non-adherent pad that covers the wound, absorptive layer that can manage exudate, and an outer layer that is water-proof thus providing a barrier to bacteria and other contaminants. Can be used as a primary or secondary dressing.

Indications:

- For use on partial or full thickness or any stage wounds with none to light exudate
- Safe to use with infected wounds

Disadvantages:

- Requires healthy, intact peri-wound skin



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Gauze Dressings

Types of wounds appropriate for use of a Gauze Dressing

Low exuding wounds

A wound with a primary dressing

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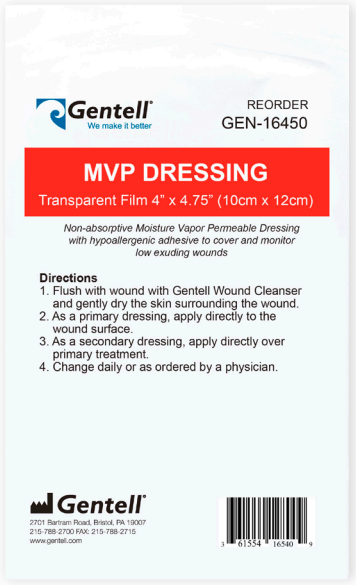
Transparent Film Dressings

Description:

Semi-permeable adhesive membrane made from polyurethane that creates a waterproof bacterial barrier. Very conforming to difficult to apply areas of the body. Can be used as a primary dressing over superficial, lightly draining wounds or as a secondary dressing to help with adherence of dressings.



Indications:

- For use on partial thickness or Stage 1 or 2 wounds with minimal drainage as a primary dressing
- Acts as “second skin” to prevent friction injuries
- Promotes autolytic debridement
- Allows for visualization of wound bed

Disadvantages:

- Not indicated for moderately or heavily exuding wounds
- May tear fragile peri wound skin

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Transparent Film Dressings

Types of wounds appropriate for use of a Transparent Film Dressing

Remodeling phase of a healing lower leg wound with minimal exudate

Full thickness burn wound almost healed with small areas open exuding very minimally

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Questions and Answers

Thank you for your time and attention

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