

Wound Dressing Overview

Wound Dressings	Product Description	Usage Considerations
Acrylic (clear) dressings	<ul style="list-style-type: none"> •Acrylic polymer pad, topped with breathable, waterproof film that has a moisture vapour transmission rate (MVTR) to support evaporation •Various sizes and shapes 	<ul style="list-style-type: none"> •Indicated for: <ul style="list-style-type: none"> · Low-exudating wounds · Autolytic debridement facilitation · Protection of intact or newly epithelialized skin •Contraindicated for moderately and highly exudating wounds and infected wounds •Enables wound monitoring without changing the dressing •Extended wear time (14–21 days) •Do not cut the acrylic pad •Avoid using on venous leg ulcers
Adhesives	<ul style="list-style-type: none"> •Various sizes and shapes, and hypoallergic properties •Classifications: <ul style="list-style-type: none"> · Adhesive suture strips · Adhesive tape: hypoallergic and non-hypoallergenic · Montgomery ties 	<ul style="list-style-type: none"> •Secures a wound cover dressing •Montgomery ties aid in securing bulky post-operative dressings
Alginates	<ul style="list-style-type: none"> •Sheets or fibrous ropes of glucuronic acid and sodium carboxymethylcellulose (seaweed derivative) •Have hemostatic capabilities •Some options contain silver •Various sizes 	<ul style="list-style-type: none"> •Indicated for: <ul style="list-style-type: none"> · Moderately to highly exudating wounds · Local hemostasis · Autolytic debridement facilitation · Filling wound dead space •Contraindicated for: <ul style="list-style-type: none"> · Dry wounds · Narrow or deep sinuses · Situations of heavy or uncontrolled bleeding •Requires a secondary dressing
Antimicrobial agents	<ul style="list-style-type: none"> •Classifications: <ul style="list-style-type: none"> · Gentian violet/methylene blue · Honey · Iodine (povidone and cadexomer) · Polyhexamethylene biguanide (PHMB) · Silver · Hydrophobic •Forms: <ul style="list-style-type: none"> · Calcium alginate · Foam · Gauze · Gel · Gelling fibre · Hydrocolloid · Non-adherent synthetic contact layer · Packing/ribbon · Paste · Powder 	<ul style="list-style-type: none"> •Indicated to reduce bacterial burden and/or to disrupt biofilms in locally infected wounds and in wounds with spreading or systemic infection (in conjunction with systemic antibiotics) •May be used prophylactically in non-healing or non-healable wounds to prevent wound infection •Iodine-based dressings are contraindicated before/after use of radio-iodine, in pregnant and breastfeeding women and in those with renal disorders •Iodine-based dressings should be used with caution in those with thyroid disorders, deep ulcerative wounds, burns or large injuries and in infants under six months of age •Leptospermum species honey (medical grade) dressings are more effective than other types of honey dressings •Honey must be medical grade •Silver dressings come in either a salt or metallic form •May be anti-inflammatory, pro-inflammatory or neutral •Antimicrobial dressing MUST come into direct contact with the wound bed to be effective •Use a topical antimicrobial dressings for two weeks before reaching conclusions about its effectiveness (two-week challenge) •Topical antibiotics should be used only under the advice of specialized clinicians for specific purposes, e.g., topical metronidazole gel for the treatment of malodour in fungating wounds. Avoid the use of topical antibiotics that can be used systemically to avoid resistance
Charcoals	<ul style="list-style-type: none"> •Odour-absorbent activated charcoal within a sleeve dressing •Some options contain silver •Various sizes and shapes 	<ul style="list-style-type: none"> •Indicated for odourous wounds •Contraindicated for highly exudating wounds •Functions as a primary and/or secondary dressing (depending on product) •Most products mask the odour but do not treat the underlying cause. The underlying cause of the odour should be investigated and treated (if possible). •Ensure that dressing edges are sealed to control odour

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Composite dressings	<ul style="list-style-type: none"> •Combination of 2 or more physically distant products produced in one dressing •Conforming, mould well •Easy to apply and remove •Absorptive layer, alginate, gelling, foam •Non-adherent •Adhesive border, tape, hydrocolloid, hydrogel 	<ul style="list-style-type: none"> •Indicated for: <ul style="list-style-type: none"> · Autolytic debridement facilitation · May be used on infected wounds · Exchange of moisture vapour •Contraindicated for: <ul style="list-style-type: none"> · Packing, tunneling, undermining
Films/ membranes	<ul style="list-style-type: none"> •Transparent, semi-permeable, polyurethane adhesive sheets •Moisture vapour transmission rates vary from film to film •Impermeable to liquid and bacterial infiltration •Various sizes and shapes 	<ul style="list-style-type: none"> •Indicated for superficial skin loss and partial-thickness wounds, including donor sites: <ul style="list-style-type: none"> · As a cover dressing for showering · To protect skin at risk of friction injury · As a secondary dressing or fixation device · To support autolytic debridement •Contraindicated for: <ul style="list-style-type: none"> · Moderately and highly exudating wounds · Infected wounds · Deep cavities · Full-thickness burns •Allows for easy assessment of the wound or skin
Foams	<ul style="list-style-type: none"> •Non-adherent (without adhesive border) or adherent (with adhesive border) polyurethane foam dressings •Various moisture vapour transmission rates •Various sizes, shapes and thicknesses •Some options include: <ul style="list-style-type: none"> · Antimicrobial · Low tack · Non-adherent contact layer on foam pad · Packing strips with foam · Pain control •Transfer forms wick exudate to a secondary cover dressing 	<ul style="list-style-type: none"> •Indicated for low- to moderately exudating wounds and to facilitate autolytic debridement •Use with caution on persons with diabetes: foam dressings do not reduce plantar pressures and excessive drainage may lead to maceration •Contraindicated for: <ul style="list-style-type: none"> · Highly exudating wounds where dressing changes are required daily or more frequently · Ischemic non-healable wounds •Functions as a primary and/or secondary dressing •May wick vertically or horizontally
Gauzes	<ul style="list-style-type: none"> •Bleached white cloth or fabric used in bandages, dressings and surgical sponges •Made from fibres of cotton, rayon and/or polyester •Options: <ul style="list-style-type: none"> · Woven or non-woven · Sterile or non-sterile · Plain or impregnated with petroleum jelly, oil or water emulsion, hydrogel or antimicrobials · Fenestrated •Various shapes, sizes and thicknesses Examples: <ul style="list-style-type: none"> · Tubular net dressing · Elastic bandages · Conforming (self-cling) 	<ul style="list-style-type: none"> •Indicated for: <ul style="list-style-type: none"> · Wounds with low to high levels of exudate · Filling dead space in wounds · Mechanical debridement (not recommended) · Delivery of pastes, ointments, and gels · Cleansing periwound tissue · Absorbing wound cleansers •Functions as a primary and/or secondary dressing or may secure a dressing •Non-woven gauze provides improved wicking and greater absorbent capacity and produces less lint; its fibres are stronger, bulkier and softer
Gelling/fibre dressings	<ul style="list-style-type: none"> •Sheets or packing strips of sodium carboxymethylcellulose •Convert to a solid gel when activated by moisture •Some options may contain silver •Various sizes 	<ul style="list-style-type: none"> •Indicated for moderately to highly exudating wounds and to facilitate autolytic debridement •Contraindicated for dry wounds and use in narrow, deep sinuses •Functions as a primary dressing: requires a secondary dressing •Acts as a wound filler

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Hydrocolloids	<ul style="list-style-type: none"> •Occlusive sheet dressings with polyurethane outer layer •May contain gelatin, sodium carboxymethylcellulose and/or pectin •Available in various thicknesses, sizes and shapes •Characteristic odour may accompany dressing change and should not be confused with infection •Also available as granules or powders 	<ul style="list-style-type: none"> •Indicated for wounds with low levels of exudate and/or to facilitate autolytic debridement •Contraindicated for: <ul style="list-style-type: none"> · Moderately and highly exuding wounds · Infected wounds · Deep cavities · Lower limb ulcers with arterial insufficiency •Functions as a primary and/or secondary dressing •Observe periwound skin for maceration •Caution when used on fragile skin
Hydrogels	<ul style="list-style-type: none"> •Polymers with high water content (30–90%) •May contain pectin, collagen and preservatives •Available in gels, solid sheets or embedded into gauze 	<ul style="list-style-type: none"> •Indicated for wounds with minimal or no exudate to add moisture and/or to facilitate autolytic debridement •Contraindicated for: <ul style="list-style-type: none"> · Moderately and highly exuding wounds · Infected wounds · Lower limb ulcers with arterial insufficiency •To be applied at a minimum thickness of 5 mm •Not to be mixed with iodine paste compounds •Periwound skin may need protection from maceration
Hydrophilic dressings	<ul style="list-style-type: none"> •Paste that can conform to uneven wound bed and will adhere in a moist environment 	<ul style="list-style-type: none"> •Indicated for wounds with low to moderate exudate in difficult-to-dress areas •Facilitates autolytic debridement
Hypertonic	<ul style="list-style-type: none"> •Hypertonic sodium chloride solution or crystals impregnated into gauze ribbon or gauze wafer •Draw fluid from surface cells via osmosis •Available in various sizes 	<ul style="list-style-type: none"> •Indicated for wounds with necrotic tissue to facilitate autolytic debridement, or highly exuding wounds •Contraindicated in wounds with: <ul style="list-style-type: none"> · Granulation tissue · Exposed tendon · Low exudate •Requires a secondary dressing •May be painful on sensitive tissue
Non-adherent synthetic contact layers	<ul style="list-style-type: none"> •Porous sheet dressings with low adherence to tissue •Allow the transfer of exudate to secondary dressing •May be composed of silicone, petroleum, paraffin, medicated or non- medicated tulles •Options available containing silver, PHMB, chlorhexidine derivatives and iodine compounds •Available in various sizes and shapes 	<ul style="list-style-type: none"> •Indicated for: <ul style="list-style-type: none"> · Painful wounds · Wounds with friable granulation tissue · Prevention of secondary dressings adhering to the wound · Delivery of antiseptic or antimicrobial pastes, creams, gels, etc.
Pain-control dressings	<ul style="list-style-type: none"> •Foam dressings with a continuous release of ibuprofen (IBU) 	<ul style="list-style-type: none"> •Indicated for the treatment of painful, exuding wounds •Should be applied directly to wound surface to allow for effective absorption •Low tack for easier removal •Do not exceed recommended dose •Does not impact systemic levels of ibuprofen and does not have risk of gastrointestinal complications

Definitions:

- Primary dressing:** Comes directly in contact with the wound bed.
- Secondary dressing:** Covers a primary dressing – not all secondary dressings support thermal insulation and contain exudate.
- Contact layer:** Thin, single layer dressings that are designed to protect fragile tissue in the wound base.
- Occlusive dressing:** Seals a wound from the outside environment and does not allow moisture evaporation.
- Semi-occlusive dressing:** Allows some oxygen into the dressing and allows some moisture to evaporate.
- Moisture vapour transmission rate (MVTR):** The amount of moisture that can evaporate through the dressing.

