

Wound Care Essentials

WOUND HEALING | Understand the process before choosing treatment

Four overlapping phases [1]

Phase	What happens
Haemostasis	Begins immediately: vessels constrict and platelets/fibrin help stop bleeding.
Inflammation	Immune cells clear microorganisms and debris. Some early local redness, warmth and swelling can occur.
Proliferation	Granulation tissue, new capillaries, epithelialisation and contraction help fill and close the wound.
Remodelling / maturation	Collagen reorganises and scar strength increases over months. The scar does not regain the full strength of uninjured skin.

Phases overlap; they are not rigid day-by-day categories. Persistent inflammation, infection, poor perfusion or repeated trauma can delay progression.

How the wound closes

Primary intention: edges are approximated, as in a closed surgical incision.

Secondary intention: the wound remains open and fills through granulation, contraction and epithelialisation.

Tertiary intention: delayed primary closure after a period of open management, for example while contamination is controlled.

Assess and document consistently

Record the cause and location; length, width and depth; wound-bed tissue; exudate amount/type; odour after cleansing; edges, undermining or tunnelling; surrounding skin and pain. Assess perfusion, pressure exposure, nutrition, glucose control and infection risk. Use the same measurement method for trends. [2]

Escalate: spreading erythema, increasing pain, purulent drainage, systemic illness, new necrosis or poor perfusion. Wound separation (dehiscence) needs prompt review; exposed abdominal organs (evisceration) are an emergency.

Remember: wound-healing phases describe repair. Pressure-injury stages describe the extent of pressure-related tissue damage.

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PRESSURE INJURIES | Stage by tissue involvement, not appearance alone

Pressure, often combined with shear, damages skin and/or deeper tissue, usually over a bony prominence or beneath a device. Establish the cause before applying a pressure-injury stage. [3]

Classification	Key recognition features
Stage 1	Intact skin with localised non-blanchable erythema. Colour changes may be less visible in dark skin; assess temperature, firmness and sensation.
Stage 2	Partial-thickness skin loss with exposed dermis, or a serum-filled blister. Pink/red moist bed; no visible fat, granulation tissue, slough or eschar.
Stage 3	Full-thickness skin loss; fat may be visible. Undermining/tunnelling may occur. No exposed or directly palpable fascia, muscle, tendon, cartilage or bone.
Stage 4	Full-thickness skin and tissue loss with exposed or directly palpable fascia, muscle, tendon, cartilage or bone.
Unstageable	Full-thickness loss with slough/eschar obscuring the extent of damage. The underlying stage cannot yet be determined.
Deep tissue pressure injury (DTPI)	Persistent non-blanchable deep red, maroon or purple discolouration, or epidermal separation revealing a dark bed/blood-filled blister. Skin may be intact or open.

Staging safeguards

Do not label moisture-associated skin damage, skin tears or burns as Stage 2. Mucosal pressure injuries are not staged using this system. Device-related injuries on skin are staged using the same tissue criteria. [3]

No reverse staging: a healing Stage 4 remains a healing Stage 4; it does not become Stage 3 or 2. Document healing and measurements separately.

Stable eschar: dry, adherent, intact eschar on a heel or ischaemic limb, without erythema or fluctuance, should not be softened or removed. Offload and assess perfusion; new drainage or inflammation needs urgent review. [3]

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DRESSING SELECTION | Match function to the wound

Choose according to tissue, exudate, depth, infection, surrounding skin, pain and patient needs. Aim for moisture balance: a moist wound bed with protected surrounding skin. Product instructions and the wound-care plan determine use and change frequency. [2,4]

Dressing	Typical role	Important caution
Transparent film	Protection for superficial wounds with minimal exudate.	Nonabsorbent; avoid trapping excess drainage. Adhesives may injure fragile skin.
Nonadherent contact layer	Protects fragile tissue or skin tears; supports atraumatic removal.	Often needs an absorbent secondary dressing.
Hydrogel	Adds moisture to a dry or minimally exuding wound; may support autolysis.	Can macerate surrounding skin. Do not hydrate stable ischaemic/heel eschar.
Hydrocolloid	Moisture retention and autolysis in suitable low/moderate-exudate wounds.	Generally avoid untreated infection or heavy exudate. Gel/odour alone does not prove infection.
Foam	Absorbs moderate/heavier exudate and provides protection.	Absorbency varies. Does not replace pressure offloading.
Alginate / gelling fibre	Absorbs moderate/heavy exudate; selected products fill cavities.	Avoid dry wounds; usually needs a secondary cover. Do not pack tightly.
Antimicrobial dressing	Selected use for a defined infection-related indication.	Not routine for every wound; review response and duration. Spreading/systemic infection needs medical treatment.

Reason through the choice

Dry wound: consider whether moisture donation is appropriate after perfusion and eschar assessment.

Heavily exuding wound: absorb excess fluid and protect the surrounding skin.

Fragile granulation: use atraumatic removal and avoid unnecessary disruption.

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WET-TO-DRY & PREVENTION | Connect exam knowledge to current care

What is wet-to-dry?

Moistened gauze is placed in the wound, allowed to dry and then removed. Adherent tissue is pulled away: this is **nonselective mechanical debridement**, which can remove healthy tissue as well as devitalised tissue and cause pain. It is different from a dressing intended to remain moist. [5]

Recognise the method in older exam questions, but do not present it as routine modern care for a healthy granulating wound. Moisture-balancing dressings are generally preferred; NICE advises against gauze dressings for adult pressure ulcers. Clarify a wet-to-dry order when its indication or safety is uncertain. [4,5]

A dressing alone will not prevent further injury

Relieve pressure: use an individual repositioning plan, appropriate support surfaces and heel offloading. Reassess the skin response and avoid positioning directly on the injury where possible. Check under devices; reduce shear during transfers. [4]

Protect skin and support healing: manage incontinence and moisture, use suitable skin barriers, address nutritional deficits and hydration needs, manage pain and optimise perfusion/glucose control. Do not massage reddened pressure areas. [2,4]

At each dressing change: explain the procedure, provide analgesia when needed, use the prescribed clean/aseptic technique, cleanse appropriately, reassess and document. Account for all packing removed and inserted; do not overpack. [2]

References

1. NCBI Bookshelf: Physiology, Wound Healing
2. Open RN, Nursing Skills: Wound care and dressings
3. NPIAP staging system: consensus definitions and rationale
4. NICE CG179: Pressure ulcer prevention and management
5. Wet-to-Dry Dressings Do Not Provide Moist Wound Healing