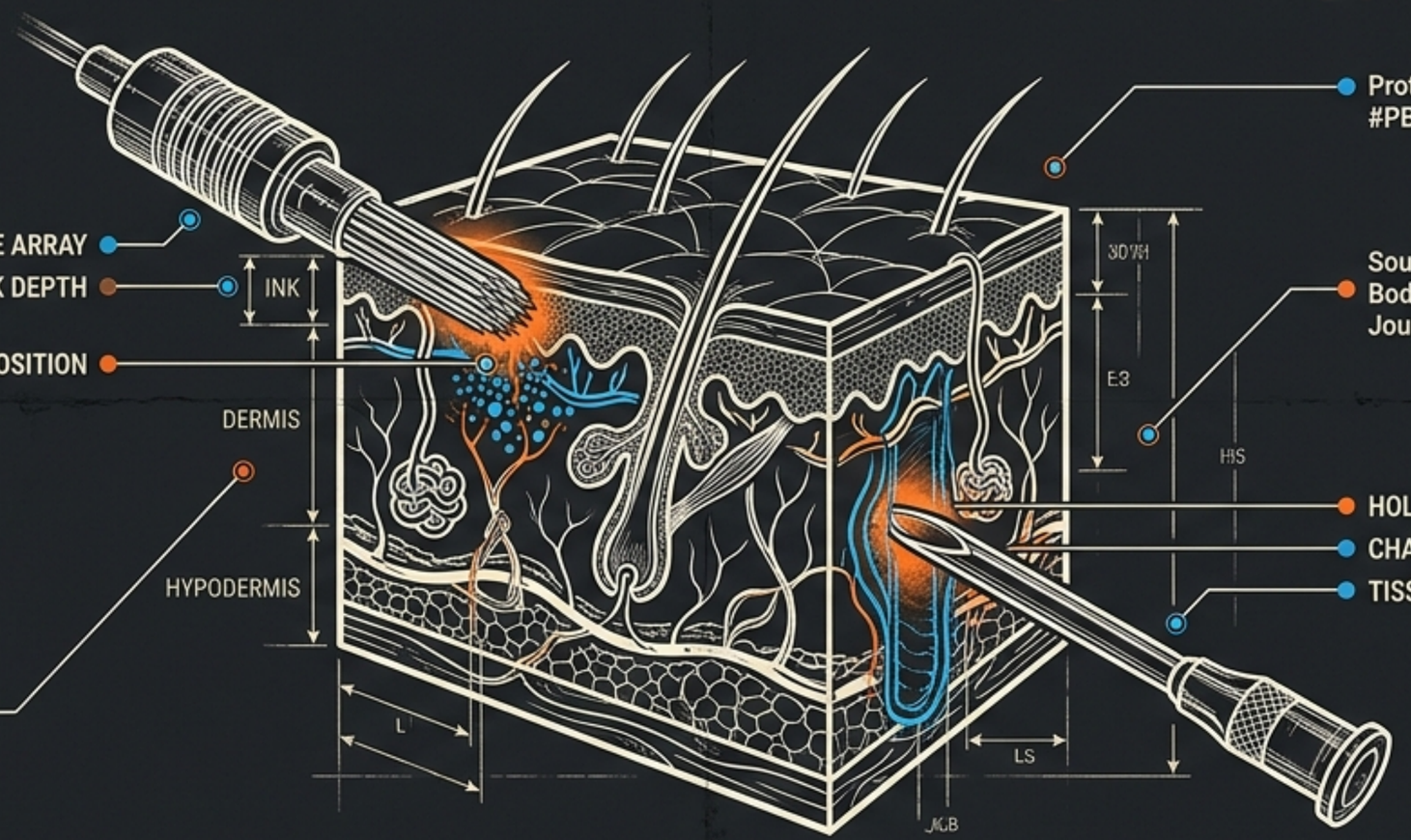
# AFTERCARE IS NOT PREFERENCE.

## It is applied wound-healing biology.




Protocol Reference:
#PB-2026-AFTE

Sourced from the
Body Art Engineering
Journal | Poli International

**The products change. The biology does not.**
**Every aftercare decision is decided at the cellular level.**

# THE 4-PHASE BIOLOGICAL CASCADE

**Phase 1: Haemostasis**
Vasoconstriction, platelet plug, fibrin clot.

**Phase 2: Inflammation**
Neutrophils & Macrophages clear debris. Normal heat, swelling, and clear exudate.

**Phase 3: Proliferation**
Fibroblast migration, angiogenesis, re-epithelialisation.

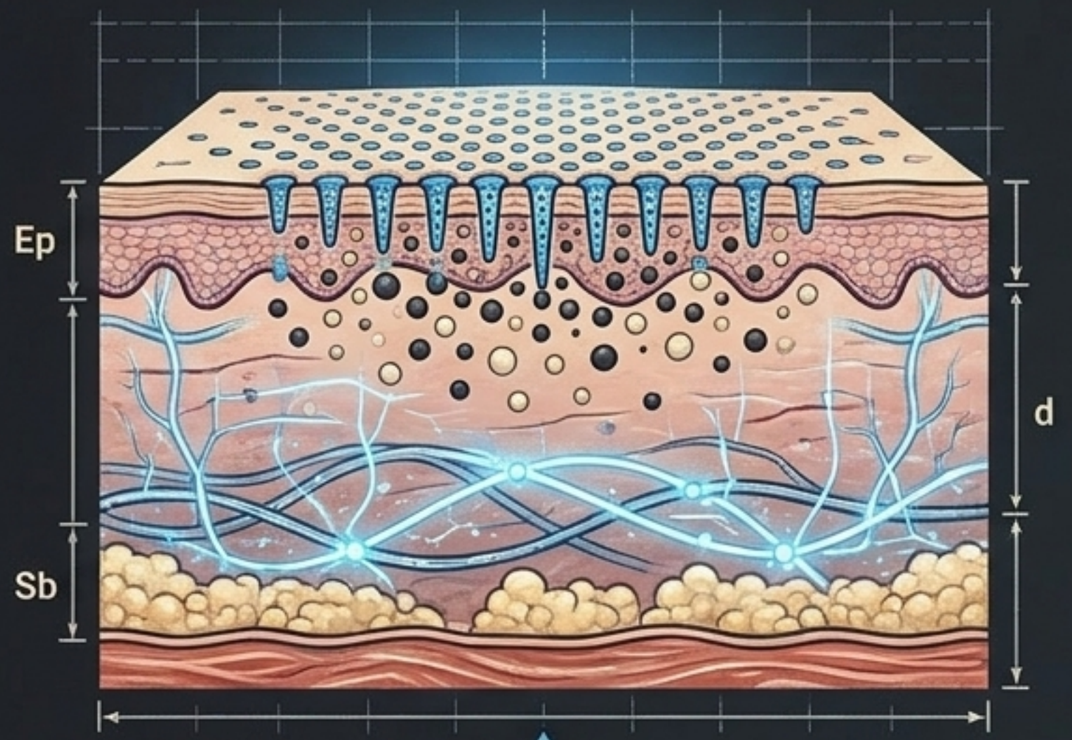
**Phase 4: Remodelling**
Collagen III replaced by stronger Collagen I.




**Applying the wrong product at the wrong phase prolongs inflammation or traps bacteria.**

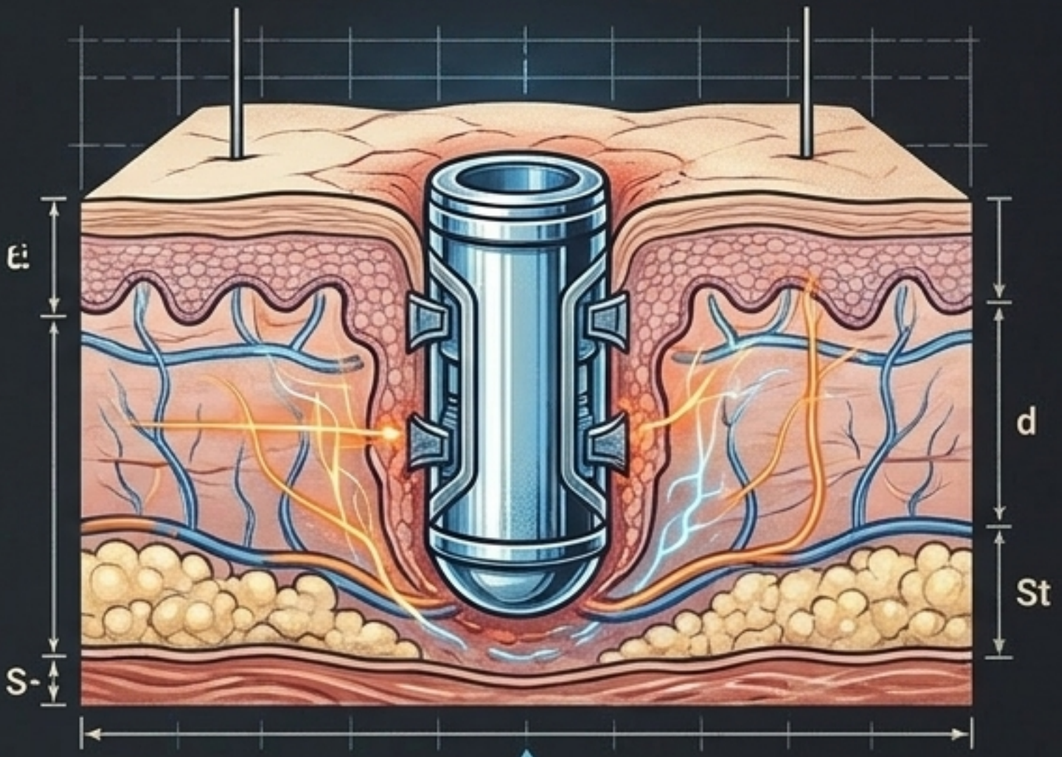
# THE BIOLOGICAL DIVIDE: SURFACE VS. PUNCTURE

## SURFACE ABRASION (Tattoo)




Requires moisture management for 2-3 weeks to support horizontal cell migration.

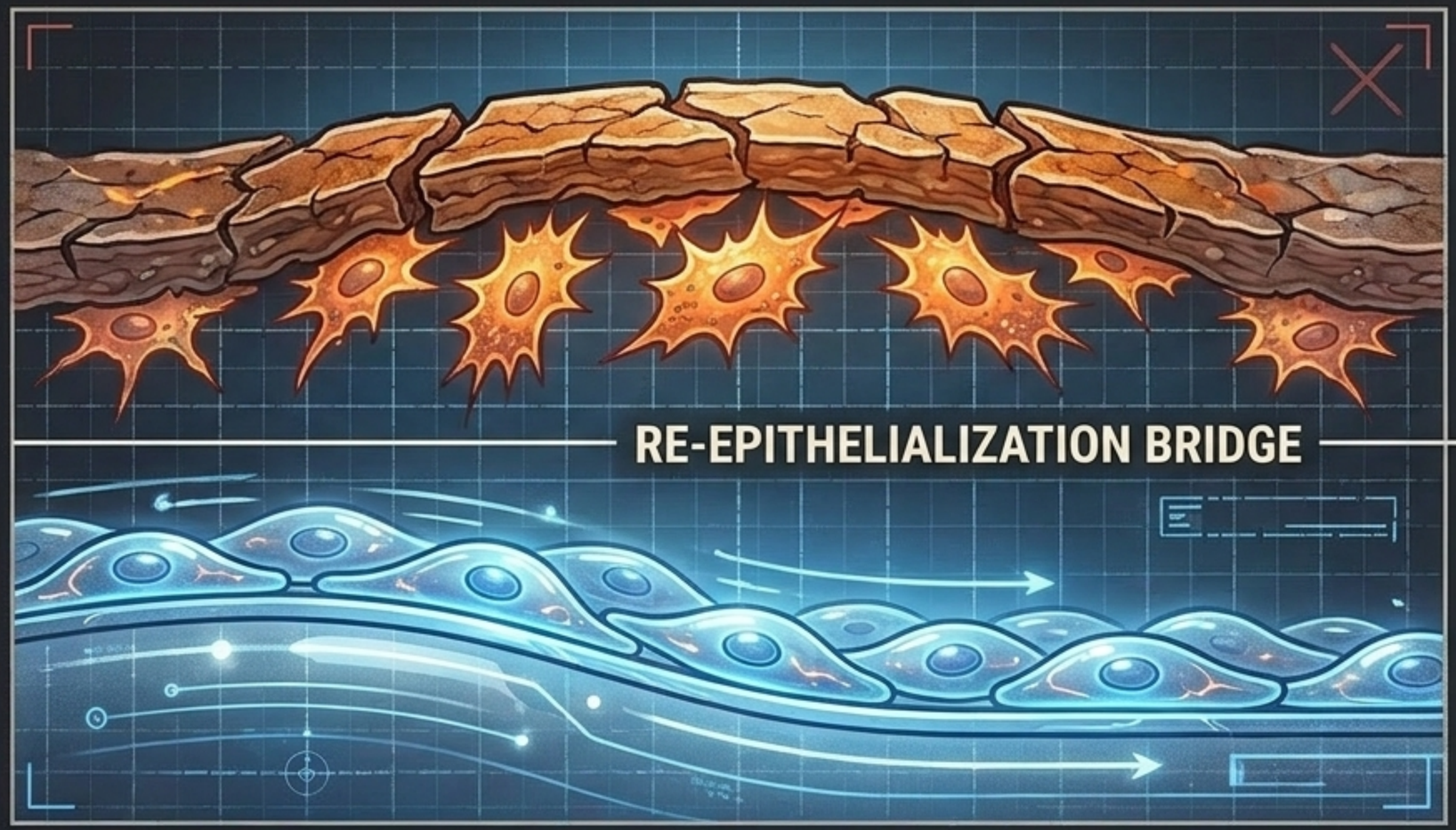
## PUNCTURE FISTULA (Piercing)




Requires weeks of unhindered tract formation. Reaches ~80% tensile strength at week 12.

**Different mechanical pathways demand different chemical interventions.**

# MOIST HEALING VS. DRY HEALING




## DRY HEALING

Dry environments force cells to burrow under rigid scabs, slowing repair and risking pigment loss.

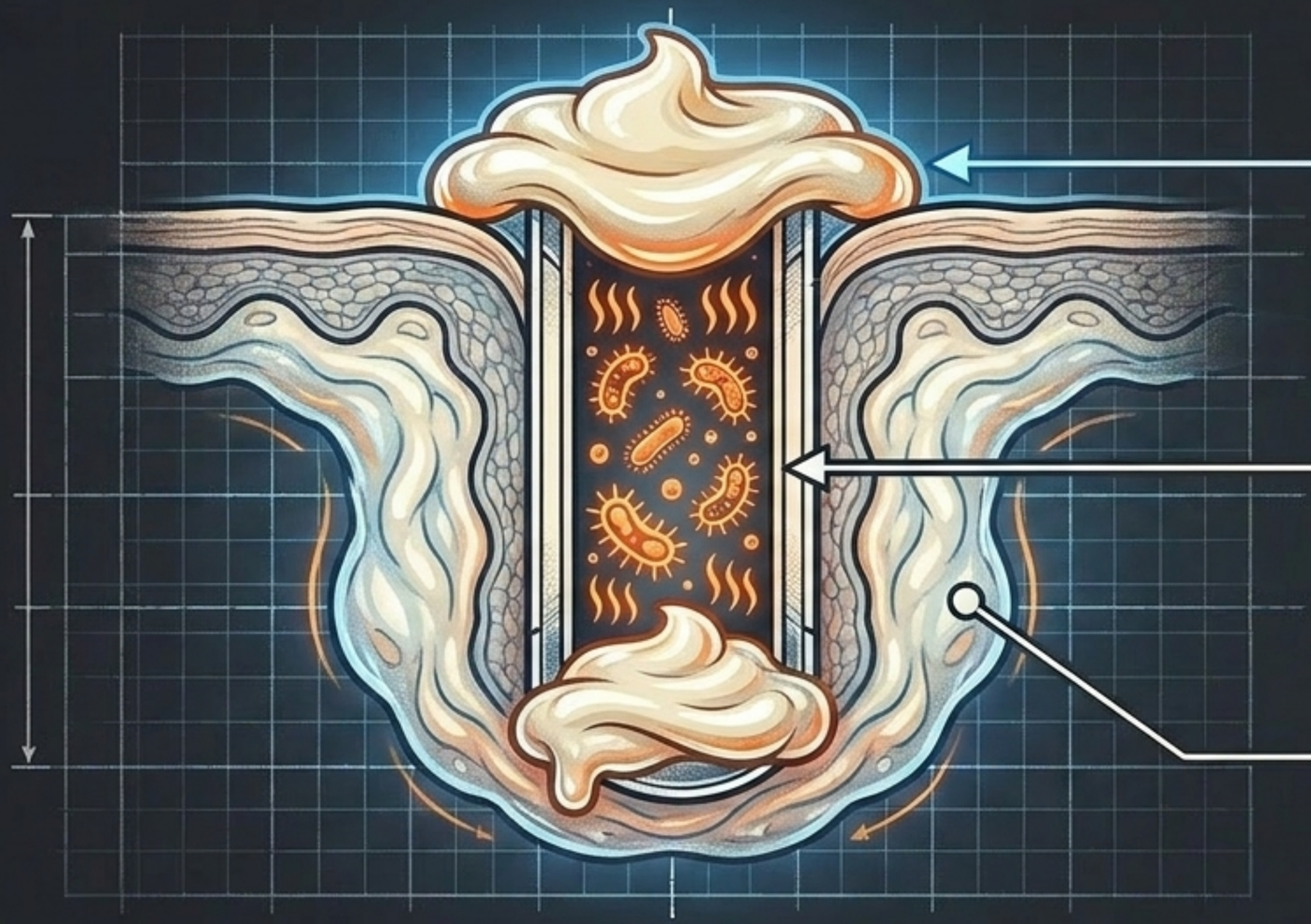
## WET HEALING

A moist environment accelerates re-epithelialisation by ~50% (Winter, 1962).

## CLINICAL PROTOCOL

Tattoos require a thin layer of petrolatum-based or dimethicone-based occlusive 2-3 times daily for the first 3-5 days. The wound should never feel greasy or suffocated.

# THE MACERATION TRAP



Occlusive Ointment (e.g., Petrolatum) blocks oxygen.

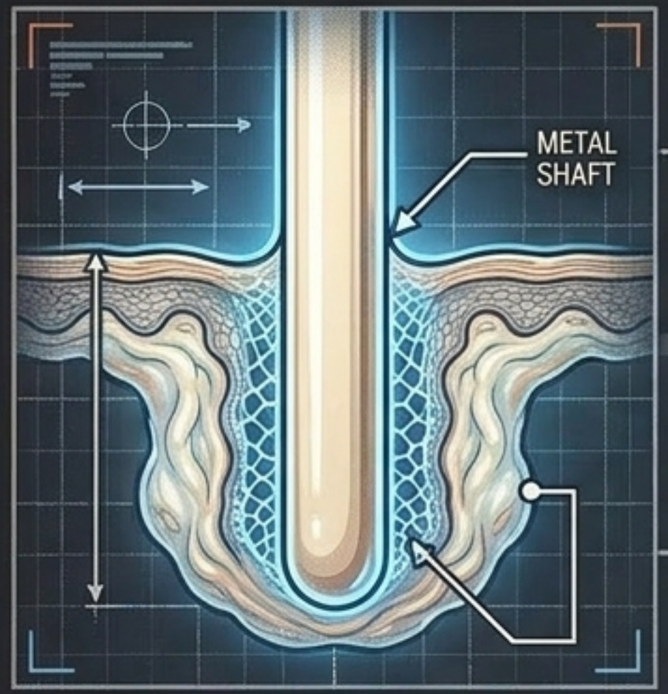
Trapped moisture and body heat create a localized anaerobic breeding ground.

Surrounding skin becomes macerated (waterlogged and weak).

**Never use occlusive ointments** on a fresh piercing. The Association of Professional Piercers (APP) standard is sterile isotonic saline, applied twice daily. Keep the area dry.

# DO NOT ROTATE THE JEWELRY

**STEP 1** (THE HEALING)




**STEP 2** (THE ROTATION)

**STEP 3** (THE CONTAMINATION)


**STEP 1 (THE HEALING)**
Fragile new epithelial layer forms inside the fistula.

**STEP 2 (THE ROTATION)**
Movement physically tears the new cellular layer.

**STEP 3 (THE CONTAMINATION)**
Rotation drags surface bacteria from the exposed jewelry directly into the deep wound channel.

Clean the exterior entry and exit points with sterile saline and leave the hardware alone.

# THE INGREDIENT CHEMISTRY MATRIX

| | Ingredient | Function | Wound Viability | Clinical Risk |
|---|---|---|---|---|
| **Green Tier** (Safe) | White Petrolatum | Occlusive barrier | Accelerates re-epithelialisation | Maceration if applied too thickly. |
| | Dimethicone | Silicone occlusive | Breathes better than petrolatum | Very low irritancy. |
| **Yellow Tier** (Caution) | Panthenol (Pro-Vit B5) | Humectant | Promotes fibroblast growth | Sparse tattoo-specific data. |
| | Lanolin | Emollient | Reduces water loss | Contact allergen in ~2% of patients. |
| **Red Tier** (Do Not Use) | Fragrance / Parfum | Scent | Zero therapeutic benefit | High allergen risk. |
| | Alcohol / H2O2 | Antiseptic | Effective on intact skin only | Cytotoxic to fibroblasts. |

# CYTOTOXICITY: WHAT KILLS HEALING

**CYTOTOXIC:**
Toxic to living cells.

**FIBROBLASTS & KERATINOCYTES:**
The master repair cells responsible for closing your wound.


## THE CULPRITS


**ISOPROPYL ALCOHOL**




**HYDROGEN PEROXIDE**

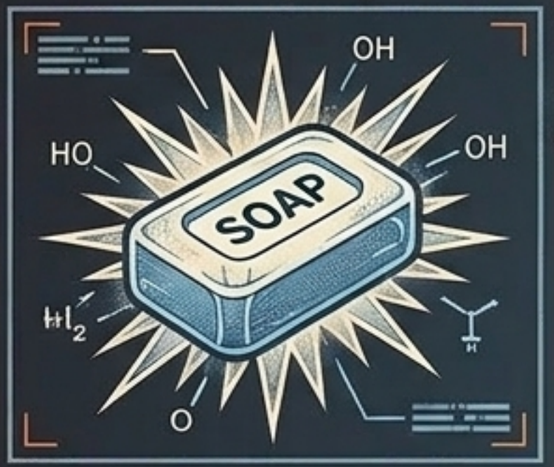


**UNDILUTED ESSENTIAL OILS**
(E.G., TEA TREE)

These agents do not just kill bacteria; they kill your own repair cells, immediately delaying wound healing and stripping pigment. If it is not formulated for wound care, it does not belong on a fresh tattoo or piercing.

# CLINICAL CORRECTIONS

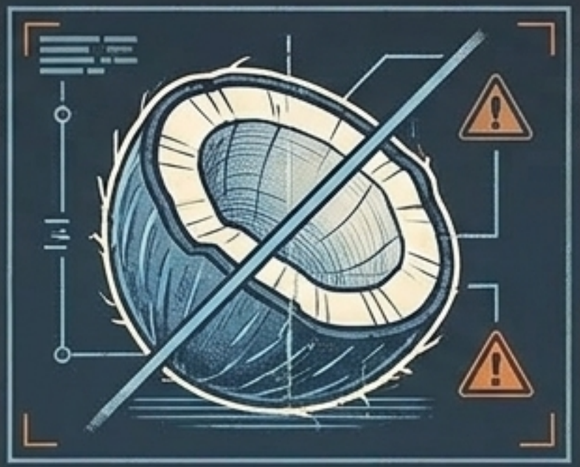
## The Soap Myth




**Avoid:** Antibacterial soaps (triclosan/chlorhexidine). Causes unnecessary irritation.

**Alternative:** Fragrance-free, dye-free mild soap.

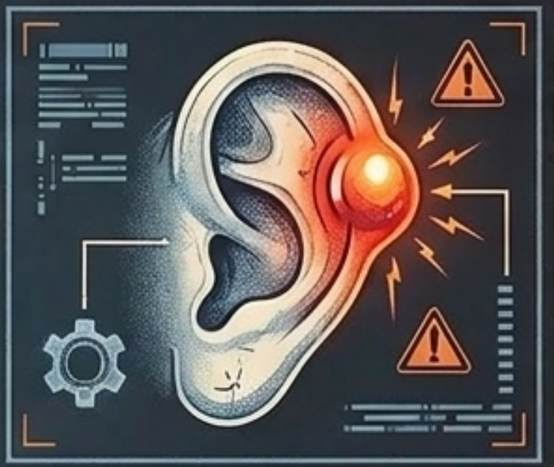
## The Coconut Oil Myth



**Avoid:** Coconut oil on an open wound. It is not sterile and its occlusive weight traps bacteria.

**Alternative:** Use specifically formulated wound-care occlusives for the first 3-5 days.
(Save coconut oil for healed tattoos).

## The Piercing Bump Myth

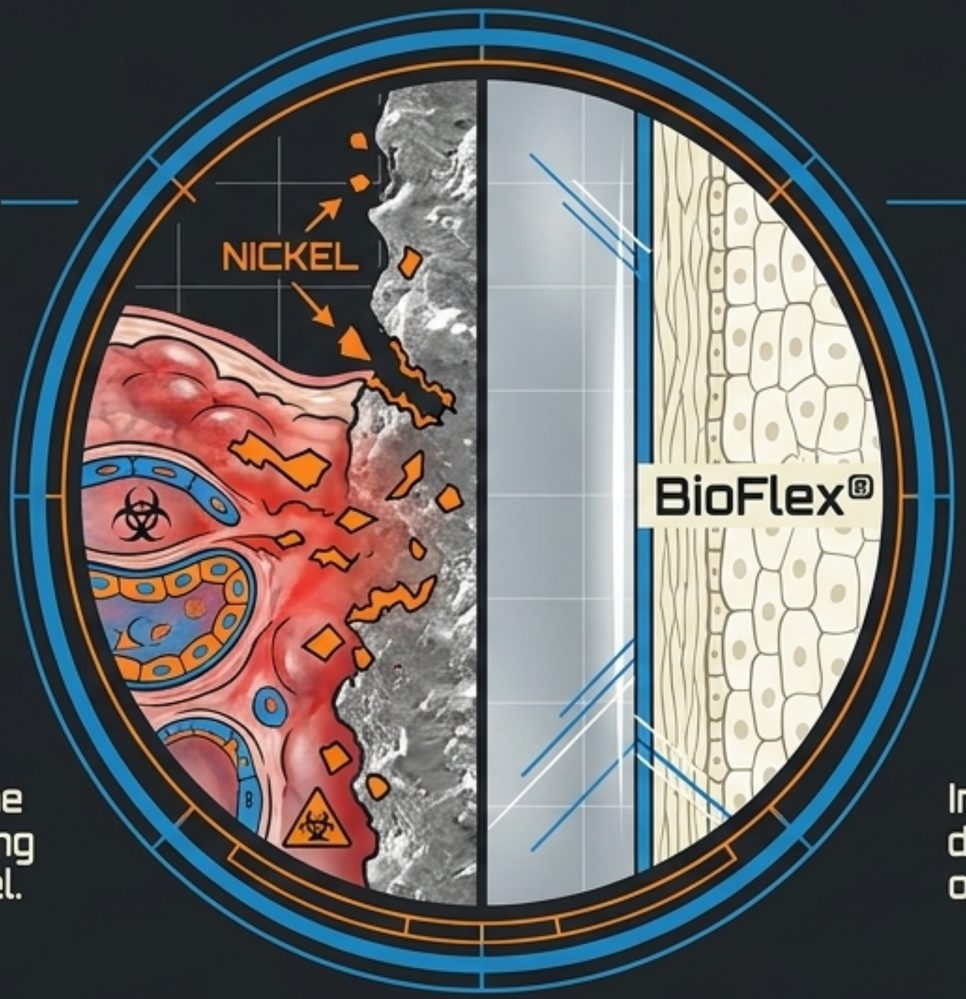


**Avoid:** Aspirin paste, tea tree oil, or over-the-counter wart removers.

**Alternative:** Identify the mechanical pressure (sleeping, headphones, long jewelry), remove it, and return to sterile saline.

# THE HARDWARE VARIABLE

## Reactive Alloy




## Medical Elastomer / Implant Grade

Unknown alloys degrade in the moist fistula, leaching sensitizing metals like nickel.

Implant-grade medical elastomers do not irritate maturing tracts or leach chemicals.

**You cannot fix a bad jewelry choice with a good aftercare routine. The product and the hardware are two halves of the same equation.**

# THE HEALING EQUATION

**CORRECT PHASE IDENTIFICATION** + **CLINICALLY SAFE MATERIAL & CHEMISTRY** + **ZERO MECHANICAL INTERFERENCE** = **OPTIMAL WOUND HEALING**

- **CORRECT PHASE IDENTIFICATION**: Applying occlusives only during the 3-5 day re-epithelialisation window.
- **CLINICALLY SAFE MATERIAL & CHEMISTRY**: Implant-grade hardware (BioFlex) + Non-cytotoxic, fragrance-free solutions.
- **ZERO MECHANICAL INTERFERENCE**: No rotating, no picking, no sleeping pressure, no harsh antiseptics.

Aftercare is a clinical protocol. Stop guessing.

| Poli International Clinical Physics Ref: #PB-2026-AFTE