Yarrow™ woundbrush



Case Study Brochure

Introduction – Approach & Clinical Methodology

This case study brochure presents a series of real-world clinical applications of the Yarrow™ woundbrush across a wide range of wound types and care settings. The objective of this collection is to demonstrate how controlled mechanical cleansing can support the effective wound hygiene while respecting tissue integrity, patient comfort and clinical workflow.

Each case included in this brochure was documented in collaboration with experienced wound care nurses operating in both home care and clinical environments. The cases reflect daily practice where wound care must balance effectiveness, safety and patient tolerance. Rather than focusing solely on ideal conditions, these cases highlight complex and often challenging scenarios such as post surgical wounds, chronic ulcers, infected wounds and fragile or irradiated tissue.

Our approach was based on three key principles. For every case, the patient profile, wound etiology and clinical challenges were clearly defined. This ensured that the use of the Yarrow™ woundbrush was always evaluated within the appropriate medical context.

The Yarrow™ woundbrush was integrated into routine wound cleansing protocols. Nurses applied the device as part of standard care, allowing for a realistic assessment of usability, safety and clinical impact over time.

The focus was placed on practical and clinically relevant outcomes such as wound hygiene, tissue preservation, infection control, patient comfort and continuity of care. Visual follow-up and clinical evolution were documented throughout the care trajectory.

An essential component of this brochure is the direct feedback from nurses working with the device in daily practice. Their experience consistently highlighted improved control during wound cleansing, even in anatomically difficult areas. They reported reduced pain and anxiety in sensitive or fragile wounds, as well as better preservation of granulation tissue and surrounding skin. In addition, nurses experienced increased consistency in wound hygiene over time and greater confidence in managing complex or high risk wounds.

This brochure aims to provide a realistic and clinically grounded overview of how controlled mechanical cleansing can contribute to modern wound care. By combining structured case documentation with hands on clinical feedback, it offers insight into both the practical application and the added value of the Yarrow™ woundbrush in everyday care.



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Case Study no. 1– Supporting Post-Surgical Wound Cleansing Prior to Skin Graft Placement

Patient
57-year-old female, healthy and medically literate.

Clinical
Large open wound after surgical evacuation of hematoma.

Challenges
Needed consistent hygiene before NPWT and skin graft

Brush Solution
Safe cleansing without damaging granulation tissue.

Clinical Outcomes & Rationale
Gentle yet effective cleansing preserved granulation tissue while maintaining a low bioburden prior to NPWT and skin grafting. This ensured an optimal wound bed, reducing infection risk and supporting successful graft preparation without delaying the surgical care pathway.

"Supporting wound hygiene throughout the care pathway."



Before surgical procedure 15/05/2025



After surgical procedure 20/05/2025



After 1 week, daily cleaining with woundbrush 27/05/2025



Skin graft 16/06/2025

Case Study no. 2 – Optimizing Wound Management for a COPD Patient with Limited Pain Tolerance

Patient
74-year-old female with advanced COPD, living independently with home care.

Clinical
Traumatic leg laceration with hematoma, following surgical treatment after initial infection control.

Challenges
Very low pain tolerance and high anxiety during daily care.

Brush Solution
Gentle mechanical cleansing reduced discomfort and improved tolerance.

Clinical Outcomes & Rationale
The controlled mechanical action of the Yarrow™ woundbrush enabled effective wound cleansing without provoking pain-related stress responses. By minimizing nociceptive stimulation and anxiety, patient cooperation improved, allowing consistent wound hygiene, an essential factor in preventing secondary infection and supporting uninterrupted healing.

"For the first time, wound care didn't scare me. The brush made a real difference."



Case Study no. 3 – Supporting Post-Amputation Wound Cleansing in a Diabetic Patient

Patient
69-year-old male with type 2 diabetes.

Clinical
Post-surgical wound following toe amputation due to infection.

Challenges
Needed sterile and consistent hygiene to reduce infection risk and support the wound healing in a compromised diabetic patient.

Brush Solution
Targeted and sterile wound cleansing that allowed precise hygiene in a small, high-risk surgical area.

Clinical Outcomes & Rationale
Precise and localized cleansing reduced the microbial load in a small, high-risk surgical wound. This targeted approach supported healthy wound bed formation while minimizing disruption to vulnerable diabetic tissue, contributing to safer daily wound care and infection prevention.

"Precise and sterile cleansing made daily care safer in this high-risk diabetic wound."



Case Study no. 4 – Supporting Burn Wound Cleansing of the Abdominal Area

Patient
53-year-old female, otherwise healthy and medically literate.

Clinical
Third-degree burn wound to the abdominal area following a domestic accident.

Challenges
Needed gentle yet consistent hygiene to prevent infection and support optimal wound healing without damaging fragile tissue

Brush Solution
Sterile, safe, and atraumatic cleansing, ensuring effective hygiene without disturbing newly formed or fragile tissue.

Clinical Outcomes & Rationale
Atraumatic cleansing allowed removal of debris and exudate while protecting fragile, newly formed tissue. Maintaining effective hygiene without additional tissue trauma supported uninterrupted wound healing and reduced the risk of secondary infection in a high-risk burn wound.

"Effective hygiene with full respect for fragile tissue."



Case Study no. 5 – Supporting Chronic Wound Cleansing After Occupational Injury

Patient
45-year-old patient following a workplace accident.

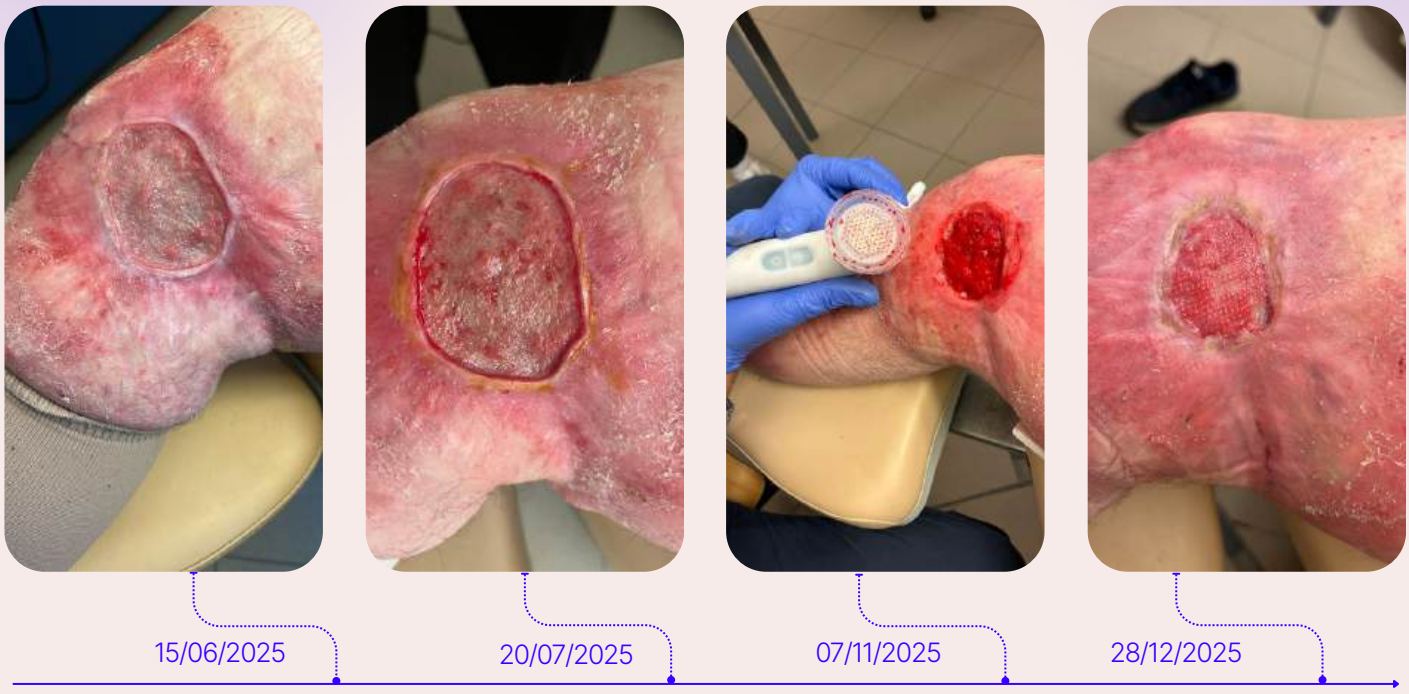
Clinical
Chronic wound with delayed healing resulting from a work-related injury, persisting for 8 months prior to referral.

Challenges
Required repeated and effective wound cleansing over an extended period while preserving vulnerable tissue and patient comfort.

Brush Solution
Consistent cleansing that supported long-term wound management and helped maintain a stable wound environment.

Clinical Outcomes & Rationale
Repeated, consistent cleansing maintained a stable wound environment over time while preserving vulnerable tissue. This supported gradual wound progression and allowed long-term management without exacerbating tissue damage or patient discomfort.

"Reliable cleansing for long-term wound care."



Case Study no. 6 – Supporting Wound Care After Minor Toe Amputation in a Diabetic Patient

Patient
65-year-old female with type 2 diabetes.

Clinical
Post-operative wound following amputation of the small toe due to diabetic foot complications.

Challenges
Required careful and consistent hygiene in a confined wound area while managing increased healing risks related to diabetes.

Brush Solution
Controlled and precise cleansing that supported accurate wound care in narrow anatomical areas without causing tissue stress.

Clinical Outcomes & Rationale
Controlled mechanical cleansing enabled accurate hygiene in a confined anatomical area, addressing increased infection risk associated with diabetic foot wounds. The stable wound environment supported predictable healing and reliable follow-up without complications.

"Precision cleansing supporting safe diabetic foot care."



Case Study no. 7 – Supporting Cleansing of Venous Leg Ulcer

Patient
76-year-old female.

Clinical
Chronic venous wound to the lower leg associated with venous insufficiency.

Challenges
Required regular and effective wound cleansing while managing exudate and fragile periwound skin.

Brush Solution
Gentle and controlled cleansing suitable for repeated use in chronic venous wounds.

Clinical Outcomes & Rationale
Gentle cleansing suitable for frequent use improved wound bed quality and reduced exudate. This supported ongoing compression therapy, critical in venous disease, while maintaining skin integrity in long-term wound management.

"Gentle cleansing that fits long-term venous wound care."



Case Study no. 8 – Supporting Post-Operative Wound Cleansing After Surgical Site Infection

Patient
59-year-old male.

Clinical
Post-operative ankle wound following fracture surgery, complicated by wound dehiscence due to infection.

Challenges
Required effective and repeated wound cleansing to control infection while supporting healing in a surgically compromised area.

Brush Solution
Controlled and consistent cleansing that supported hygiene in an anatomically challenging location without disrupting healing tissue.

Clinical Outcomes & Rationale
Effective and repeated cleansing reduced local infection signs while respecting surgically compromised tissue. This balance allowed continued therapy, improved wound control, and gradual closure without disrupting healing structures.

"Consistent cleansing helped regain control of a complex post-surgical wound."



Case Study no. 9 – Supporting Cleansing of a Third-Degree Burn Wound of the Upper Leg

Patient
82-year-old patient.

Clinical
Third-degree burn wound to the upper leg following a thermal injury.

Challenges
Required effective yet controlled wound cleansing to reduce infection risk while protecting vulnerable surrounding tissue.

Brush Solution
Balanced cleansing that allowed thorough hygiene over a larger wound surface without excessive mechanical stress.

Clinical Outcomes & Rationale
Balanced cleansing across a larger wound surface ensured effective hygiene while avoiding excessive mechanical stress. This supported a clean wound environment and prepared the wound for further therapeutic interventions.

"Effective cleansing, even in extensive burn wounds."



21/07/2025



7/08/2025



25/08/2025



09/09/2025

Case Study no. 10 – Supporting Cleansing of a Traumatic Ulcer in Fragile Skin

Patient
84-year-old female.

Clinical
Traumatic ulcer with extremely fragile skin following a minor injury.

Challenges
Required ultra-gentle wound cleansing to prevent further skin damage while maintaining adequate hygiene.

Brush Solution
Soft and controlled cleansing that allowed safe hygiene in the presence of highly fragile skin.

Clinical Outcomes & Rationale
Ultra-gentle mechanical cleansing maintained adequate hygiene without inducing additional skin trauma. This preserved skin integrity while ensuring wound stability and patient comfort in a highly fragile tissue context

"Gentle enough for even the most fragile skin."



Case Study no. 11 – Supporting Cleansing of a Chronic Venous Ulcer

Patient
71-year-old male.

Clinical
Chronic venous ulcer associated with long-standing venous insufficiency.

Challenges
Required regular wound cleansing to manage exudate and support the healing in a long-term chronic condition.

Brush Solution
Gentle and consistent cleansing suitable for repeated use in chronic venous wound care.

Clinical Outcomes & Rationale
Regular, gentle cleansing supported exudate control and sustained wound bed improvement. This facilitated structured compression therapy and long-term wound management in a chronic disease setting.

"Reliable cleansing for long-term venous wound care."



Case Study no. 12 – Supporting Wound Cleansing After Necrotizing Soft Tissue Infection

Patient
63-year-old male.

Clinical
Extensive ulcer following necrotizing soft tissue infection caused by a flesh-eating bacterium.

Challenges
Required thorough and reliable wound cleansing to manage high infection risk and support the recovery after aggressive tissue damage.

Brush Solution
Controlled cleansing that supported effective hygiene in complex wound conditions while respecting vulnerable tissue

Clinical Outcomes & Rationale
Controlled cleansing addressed high infection risk in a complex wound by maintaining hygiene without further compromising vulnerable tissue. This stability was essential for preventing reinfection and supporting gradual tissue recovery.

"Controlled cleansing in the most challenging wound conditions."



Case Study no. 13 – Supporting Cleansing of a Complex Arterial Ulcer With Tendon Exposure

Patient
86-year-old female.

Clinical
Arterial ulcer with exposed tendons due to severe arterial insufficiency.

Challenges
Required extremely careful wound cleansing to maintain hygiene while avoiding damage to exposed tendons and surrounding fragile tissue.

Brush Solution
Highly controlled and gentle cleansing that enabled precise hygiene in a complex wound with exposed deep structures.

Clinical Outcomes & Rationale
Highly controlled cleansing maintained hygiene while protecting exposed deep structures. Preserving tendon integrity was critical in supporting multidisciplinary wound management and preventing further deterioration.

"Precision cleansing in the most delicate wound situations."



Case Study no. 14 – Supporting Post-Mastectomy Wound Cleansing After Surgical Site Infection Involving Irradiated Tissue

Patient
65-year-old female.

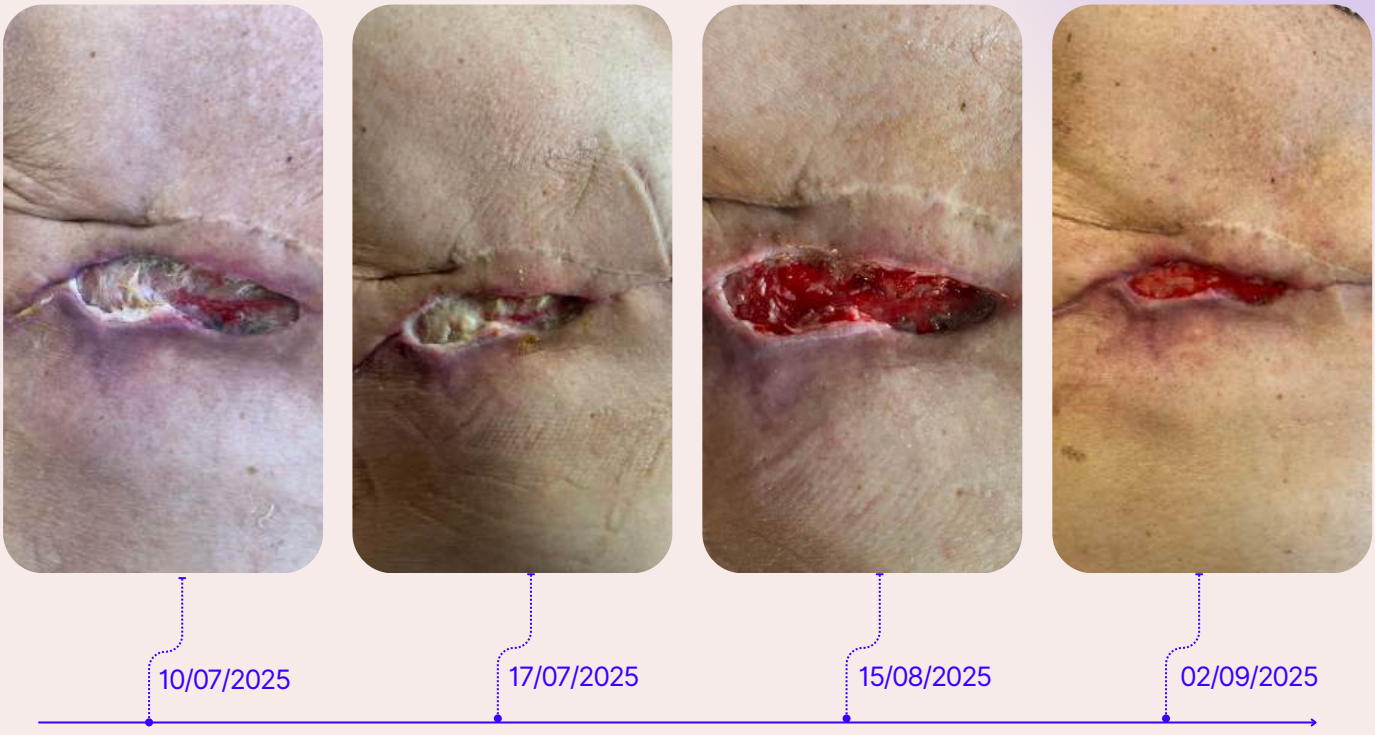
Clinical
Extensive post-mastectomy wound following surgical site infection in irradiated tissue.

Challenges
Post-operative wound following total mastectomy for breast carcinoma, complicated by wound dehiscence and infection.

Brush Solution
Controlled and gentle cleansing that supported hygiene without disrupting vulnerable post-surgical tissue.

Clinical Outcomes & Rationale
Gentle and controlled cleansing reduced infection signs while preserving post-surgical tissue integrity. This allowed continuation of both oncological treatment and wound care without interruption.

"Gentle cleansing helped restore control in a complex post-surgical wound."



Case Study no. 15 – Supporting Cleansing of a Long-Standing Chronic Leg Ulcer With Persistent Biofilm

Patient
56-year-old male.

Clinical
Chronic leg ulcer present for five years, complicated by persistent biofilm.

Challenges
Required repeated and effective wound cleansing to manage long-standing biofilm while supporting a stable wound environment.

Brush Solution
Targeted mechanical cleansing that supported biofilm disruption in a chronic wound setting.

Clinical Outcomes & Rationale
Targeted mechanical cleansing effectively disrupted persistent biofilm, improving wound conditions in a long-standing chronic wound. This enabled continued long-term management where conventional cleansing alone was insufficient.

"Targeted cleansing for chronic wounds with persistent biofilm."



Case Study no. 16 – Supporting Cleansing of a Chronic Venous Ulcer With Persistent Biofilm

Patient
96-year-old female.

Clinical
Chronic venous ulcer complicated by persistent biofilm formation.

Challenges
Required repeated and effective wound cleansing to disrupt biofilm while preserving fragile tissue in an elderly patient.

Brush Solution
Controlled mechanical cleansing that supported biofilm disruption while remaining gentle enough for repeated use.

Clinical Outcomes & Rationale
Mechanical cleansing supported biofilm disruption while remaining gentle enough for repeated use. Reducing biofilm presence improved wound bed quality and supported ongoing healing progression.

"Effective cleansing where biofilm is a persistent challenge."



Case Study no. 17 – Supporting Cleansing of a Chronic Mixed-Etiology Ankle Ulcer

Patient
75-year-old male patient with known chronic vascular insufficiency.

Clinical
Chronic ulcer located at the ankle, present for several months. The ulcer was caused by a combination of arterial insufficiency due to failure of small capillaries at ankle level (atrophie blanche) and underlying venous insufficiency.

Challenges
Mixed arterial and venous pathology resulted in fragile periwound skin and delayed healing, requiring effective wound hygiene without compromising already impaired microcirculation.

Brush Solution
Gentle and controlled mechanical cleansing enabled safe hygiene of the wound surface while respecting vulnerable microvascular tissue.

Clinical Outcomes & Rationale
Careful mechanical cleansing supported removal of surface debris and exudate without inducing additional ischemic stress. Maintaining a clean wound environment facilitated gradual wound progression and ultimately resulted in complete wound closure. This outcome supported safe continuation of vascular-focused wound management in a complex mixed arterial–venous ulcer.

"Controlled cleansing supported wound closure in a complex mixed arterial–venous ankle ulcer."



Case Study no. 18 – Supporting Wound Cleansing in Chronic Post-Traumatic Scar Tissue With Vascular Compromise

Patient
40-year-old female with a history of severe lower leg trauma 20 years ago, treated with multiple surgical interventions including flap surgery.

Clinical
New onset necrosis developing within long-standing scar tissue, associated with an underlying vascular defect, most likely of venous origin.

Challenges
Compromised vascular supply and fragile scar tissue increased the risk of delayed healing and infection, requiring careful but effective wound hygiene.

Brush Solution
Controlled and gentle mechanical cleansing allowed targeted hygiene within vulnerable scar tissue without disrupting compromised tissue structures.

Clinical Outcomes & Rationale
Gentle, localized mechanical cleansing supported removal of necrotic debris while preserving fragile, poorly perfused scar tissue. Maintaining effective wound hygiene in a compromised vascular environment helped stabilize the wound bed, reduce infection risk, and support safe, ongoing wound management in a complex chronic post-traumatic setting.

"Gentle cleansing helped maintain control in fragile scar tissue with vascular compromise."



Case Study no. 19 – Supporting Closure of a Pressure Ulcer at the Achilles Tendon

Patient
65-year-old male.

Clinical
Pressure ulcer located at the Achilles tendon region, present for three months prior to initiation of treatment.

Challenges
Sustained pressure at the Achilles area and limited soft tissue coverage increased the risk of delayed healing, requiring consistent wound hygiene without causing additional mechanical stress.

Brush Solution
Daily use of controlled mechanical cleansing with the Yarrow™ woundbrush, combined with moist wound healing principles, supported effective and atraumatic wound hygiene.

Clinical Outcomes & Rationale
Daily gentle mechanical cleansing supported removal of debris and surface contaminants while preserving vulnerable tissue at the Achilles region. Combined with moist wound healing, this consistent hygiene approach stabilized the wound environment and ultimately resulted in complete wound closure after a prolonged non-healing period.

"Consistent daily cleansing supported closure of a long-standing pressure ulcer at the Achilles region."



Case Study no. 20 – Supporting Wound Cleansing After Minor Trauma in a Vascularly Compromised Leg

Patient
Same 75-year-old male patient as Case Study no. 18, with known chronic arterial and venous insufficiency.

Clinical
Traumatic wound to the shin following minor impact, resulting in skin breakdown in an area with compromised vascular supply.

Challenges
Even minor trauma led to tissue breakdown due to poor microcirculation, requiring precise and atraumatic wound cleansing to prevent deterioration and infection.

Brush Solution
Targeted and gentle mechanical cleansing allowed accurate hygiene of the traumatic wound without causing further tissue damage.

Clinical Outcomes & Rationale
Localized mechanical cleansing maintained effective hygiene and prevented secondary wound enlargement. The stable wound environment supported predictable healing, leading to complete wound closure without complications in a patient with limited vascular reserve.

"Gentle, targeted cleansing supported complete wound closure after minor trauma in a vascularly compromised leg."



Case Study no. 21 – Supporting Healing of a Heel Pressure Ulcer After Intensive Care Stay

Patient

67-year-old male.

Clinical

Heel pressure ulcer developed following prolonged immobilization during an intensive care unit stay.

Challenges

Heel location and prior critical illness increased the risk of delayed healing, requiring effective debridement and ongoing wound hygiene without compromising surrounding tissue.

Brush Solution

Initial sharp debridement was followed by controlled mechanical debridement using the Yarrow™ woundbrush to support the ongoing wound cleansing and maintenance.

Clinical Outcomes & Rationale

Sequential use of sharp debridement and gentle mechanical cleansing supported effective removal of devitalized tissue while preserving viable structures. Consistent mechanical debridement maintained a clean wound bed and supported progressive wound improvement during ongoing treatment.

"Combined sharp and mechanical debridement supported sustained wound improvement in a complex heel pressure ulcer."



Case Study no. 22 – Supporting Cleansing of a Traumatic Venous Leg Ulcer

Patient
78-year-old female

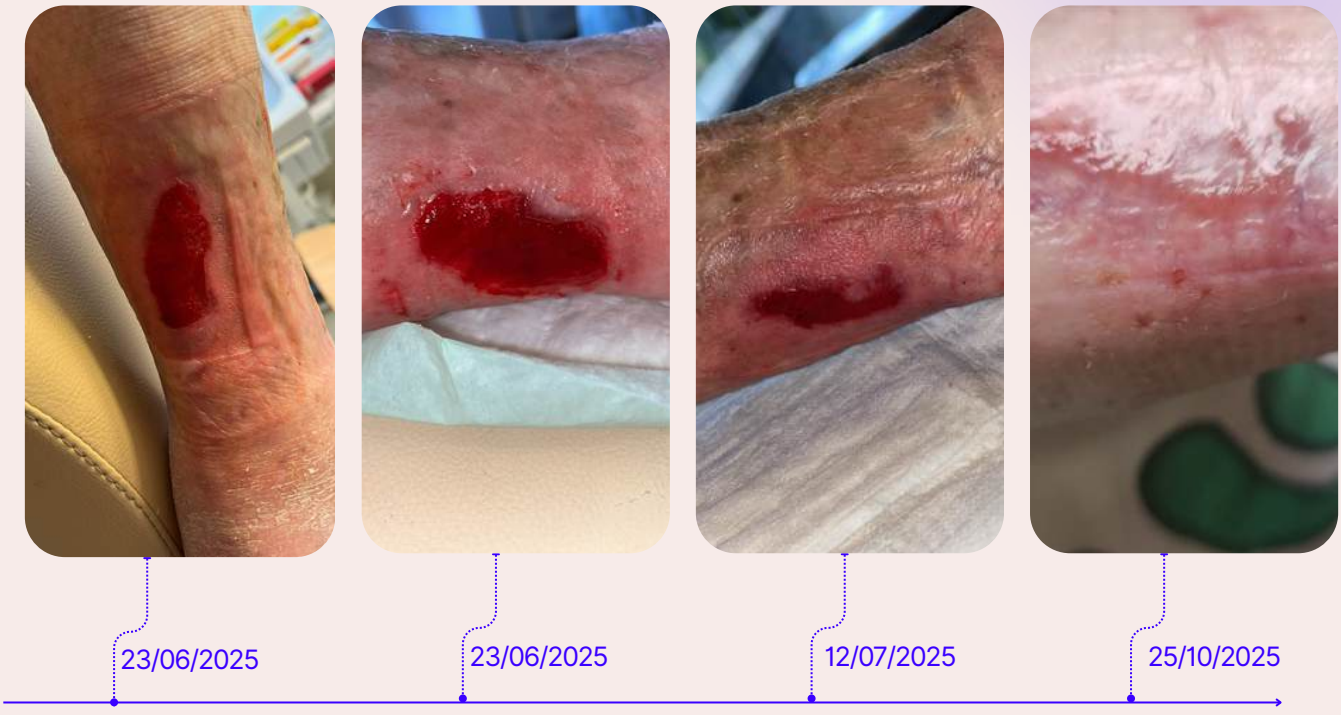
Clinical
Venous leg ulcer developing after minor trauma, with impaired venous return contributing to delayed wound healing.

Challenges
Venous insufficiency increased the risk of prolonged exudation and delayed healing, requiring consistent wound hygiene without aggravating fragile periwound skin.

Brush Solution
Gentle and controlled mechanical cleansing enabled effective daily wound hygiene while respecting vulnerable venous tissue.

Clinical Outcomes & Rationale
Consistent mechanical cleansing supported removal of debris and exudate while maintaining skin integrity in a venous-compromised environment. This stable wound environment facilitated predictable wound progression and ultimately resulted in wound closure without complications.

"Gentle, consistent cleansing supported healing of a traumatic venous leg ulcer."



Case Study no. 23 – Supporting Management of a Venous Leg Ulcer with Persistent Biofilm

Patient

83-year-old female.

Clinical

Venous leg ulcer with signs of chronic inflammation and presence of adherent biofilm.

Challenges

Chronic wound environment with persistent biofilm and limited therapy adherence, complicating consistent wound management and delaying healing progression.

Brush Solution

Controlled mechanical debridement using the Yarrow™ woundbrush was implemented to disrupt and remove biofilm and support the ongoing wound hygiene.

Clinical Outcomes & Rationale

Regular mechanical debridement with the Yarrow™ woundbrush supported effective disruption of the biofilm and improved wound bed conditions. Despite inconsistent adherence to therapy, repeated cleansing contributed to better exudate control and gradual wound stabilization.

"Mechanical debridement helped us regain control over a difficult venous ulcer with persistent biofilm."



Case Study no. 24 – Supporting Closure of a Traumatic Wound With the Yarrow™ Woundbrush

Patient
60-year-old female.

Clinical
Traumatic lower leg wound following a fall down the stairs, complicated by fragile skin and impaired healing capacity due to long-term corticosteroid therapy.

Challenges
Very fragile skin, delayed wound healing, high risk of infection, and reduced tissue resilience linked to COPD and chronic cortisone use.

Brush Solution
Controlled mechanical cleansing with the Yarrow™ woundbrush was integrated into the wound care regimen to support effective wound hygiene while preserving fragile tissue. The approach focused on gentle and consistent cleansing to reduce bioburden without causing additional trauma.

Clinical Outcomes & Rationale
Gentle mechanical cleansing maintained a clean wound environment while protecting vulnerable tissue. This supported gradual healing progression and resulted in complete wound closure within approximately 5 to 6 months.

"Protecting fragile skin while maintaining hygiene was key to closure."



Case Study no. 25 – Supporting Complete Closure of a Heel Pressure Ulcer With Adjunctive NPWT

Patient
80-year-old male.

Clinical
Heel pressure ulcer associated with prolonged pressure and reduced mobility.

Challenges
Heel location, advanced age, and limited tissue padding increased the risk of delayed healing, requiring consistent wound hygiene and advanced wound therapy.

Brush Solution
Controlled mechanical cleansing with the Yarrow™ woundbrush was integrated into the wound care regimen to support the effective hygiene while preserving vulnerable tissue, in combination with negative pressure wound therapy (NPWT).

Clinical Outcomes & Rationale
Gentle and consistent mechanical cleansing supported removal of debris and surface contaminants while maintaining tissue integrity at the heel. In combination with NPWT, this stable wound environment facilitated predictable wound progression and ultimately resulted in complete wound closure within approximately 4.5 months.

"Combined mechanical cleansing and NPWT supported complete closure of a complex heel pressure ulcer."



Yarrow™

Wanna know what all the ~~pus~~ is about?

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More Info

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