

PolyMem®

Wound Dressings

Fragile Skin • Burns • Skin Tears • EB Wounds • Full/Partial Thickness Wounds • Traumatic Wounds • Fragile

PolyMem's unique formulation has the ability to reduce patients' total wound pain experience while actively encouraging healing^{1,2,3}



at Wounds • Full/Partial Thickness Wounds • EB Wounds • Skin Tears • Burns • Fragile Skin • Burr

More Healing

PolyMem is a unique **multifunctional dressing** specifically designed to reduce a patient's total wound pain experience, while actively encouraging healing. All PolyMem dressings effectively cleanse, fill, absorb and moisten wounds throughout the healing continuum.



- Superabsorbent
- Mild, tissue-friendly wound cleanser
- Glycerin moisturizer

Activated by wound fluid...

- The PolyMem dressing will expand and gently fill the wound.
- The mild, tissue-friendly wound cleanser and the glycerin incorporated in the dressing will be released to the wound bed, while the superabsorbent matrix will bind fluid in the dressing.
- The semi-permeable film cover will control moisture vapor transmission.

CLEANSSES:

- Wound is continuously cleansed which minimizes the need for additional cleansing during dressing changes.
- Mild cleanser is activated by moisture.⁴
 - Supports autolytic debridement by reducing interfacial tension between healthy tissue and non-viable tissue.^{4,5}
- Powerful absorbing agents
 - Help to draw the non-viable tissue from the wound into the dressing.

Infected crushed-foot injury; patient had only limited ability to come to clinic more frequently.⁶ No wound cleansing was done during dressing changes on this patient.



2 OCT 7 cm x 7 cm x 0.3 cm 6 OCT 7 cm x 7 cm x 0.2 cm 17 OCT 6.7 cm x 5.8 cm

Foul-smelling 4-month-old non-healing, Grade IV heel pressure ulcer in Alzheimer's patient.⁷ No wound cleansing was done during dressing changes on this patient either.



11 APRIL 8 cm x 6 cm x 2 cm 30 APRIL 14 MAY

MOISTENS:

- The built-in moisturizer (glycerin) helps establish and maintain a moist healing environment.
 - Glycerin, together with the other components, ensures the dressing does not adhere to the wound.
- The hygroscopic glycerin, together with the other components, creates a "water-flux" from the deep tissues into the area of the wound. This "water-flux" is important in healing wounds as it brings healing agents, including nutritional and growth factors, from the deep tissues to the wound.⁸
 - Glycerin is also recognized to help reduce odor and hypergranulation.⁹



11 JUNE 16 JUNE 4 JULY

PolyMem dressings helped maintain an ideal moisture level in this wound. The tendons were kept moist and maintained their viability throughout management.¹⁰



7 JULY 23 JULY

PolyMem dressings helped to donate moisture and absorb excess exudate as needed during wound management, maintaining viability of tendons.¹¹



FILLS:

- PolyMem dressings are designed to be very comfortable. They are available in ideal configurations that naturally conform to shallow (less than 0.5 cm), cavity, tunnel, and undermined wounds. PolyMem dressings help ensure that both full- and partial-thickness wounds can be properly addressed.

Debrided pressure ulcer with communicating fistula infected with MRSA.



DAY 0 DAY 1

Painful open abdominal surgical wound managed with saline-soaked gauze for 3 days. Patient had severe pain due to saline gauze.



DAY 3 DAY 4 DAY 22

ABSORBS:

- Wound fluid contains natural growth factors and nutrients. Superabsorbents contained in the dressings draw wound fluid to the wound site. These superabsorbents have high affinity for the watery portion of wound fluid. The net result is concentration of the larger components in the wound.¹²
- Powerful absorption properties help draw non-viable tissue into the dressing where it is easily discarded along with the dressing.



DAY 0 DAY 2 DAY 7

PolyMem provides a visual indication of when to change the dressing without physically looking under the dressing.

Change dressing when exudate, visible through top of dressing, reaches approximate wound margin.



DAY 0 DAY 2 DAY 7

PolyMem is standard of care for donor sites at some facilities.³

Less Pain



PolyMem dressings help reduce wound pain associated with dressing changes:

- Dressings which stick to the wound bed cause wound pain and trauma when they are removed during dressing changes and are also associated with delayed healing.^{17,18} PolyMem dressings are non-adherent to the wound bed.¹⁷
- Cleansing wounds is known to cause wound pain during dressing changes.¹⁸ PolyMem dressings usually eliminate the need for wound bed cleansing during dressing changes.
- PolyMem dressings facilitate effective autolytic debridement, reducing the need for more painful debridement options.

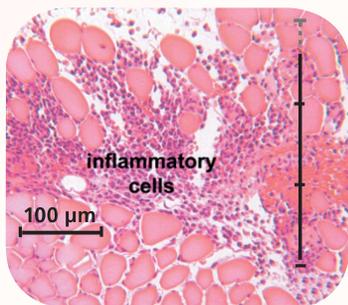
PolyMem also helps reduce wound pain by altering the actions of certain pain-sensing nerve endings.¹⁹

The most common cause of pain in chronic wounds is tissue damage, which is referred to as nociceptive pain or inflammatory pain.^{20,21} Nerve damage is another cause of wound pain and is called neuropathic pain.^{20,21} Neuropathic pain is often experienced after chronic unrelieved nociceptive pain.^{20,21}

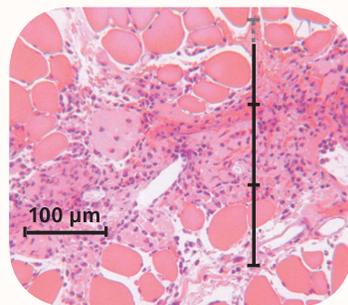
PolyMem formulation dressings help to inhibit the action of some of the pain-sensing nerve fibers (nociceptors) which carry some of the pain messages after tissue-damaging injuries and inflammation.¹⁹ These nerve endings transmit information that can result in **1**) allodynia (pain caused

by normally non-painful stimuli, such as lightly brushing the skin); **2**) primary hyperalgesia (increased sensitivity to pain at the site of injury), and **3**) secondary hyperalgesia (pain caused by touching an uninjured area surrounding the injured site).^{21,22,23} These populous nerve endings, found in the epidermis, dermis, muscle, joints and viscera, are also responsible for spreading the inflammatory reaction into surrounding uninjured tissues.^{20,21,22,23,24} The spreading of the inflammatory reaction is often clinically evidenced by increased temperature, pain, bruising and swelling beyond the immediate zone of injury.^{21,24}

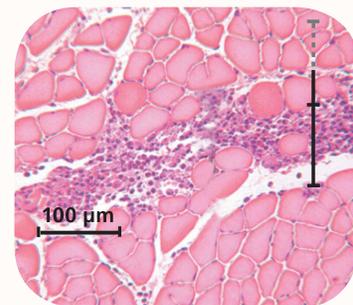
POLYMEM HELPS REDUCE SPREAD OF INFLAMMATORY REACTION INTO SURROUNDING, UNINJURED AREAS



(A) Incision only



(B) Incision with gauze



(C) Incision with PolyMem

This series of images shows the width of the spread of the inflammatory cells, in muscle, around an incision. The dark portion of the scale in each image (each segment is 100μm) represents the spread of the zone of the inflammatory reaction around the center line of the incision. In images A and B, there is no difference in the spread of the inflammatory reaction around the center of the injury. In image C, notice how PolyMem reduces the spread of the inflammation into the surrounding tissue. Statistically, PolyMem reduces the spread of the inflammatory reaction into the surrounding undamaged tissue by approximately 25 percent.¹⁹

rope filler



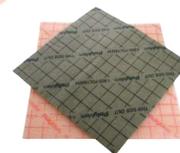
cavity filler



extra thick



standard thickness



adhesive bordered



PolyMem Non-Adhesive Dressings:

Are the optimal choice when cutting dressings to size and taping or tapeless is your preferred method of application. Also available with nanocrystalline silver (PolyMem Silver) and with extra thickness (MAX® version).



PolyMem Urethane Film-Adhesive Dressings:

The ultra-thin, adhesive-coated urethane film, together with the PolyMem membrane, will provide a breathable yet tough, protective, water-resistant dressing of unsurpassed versatility.



PolyMem Cloth-Backed Adhesive Dressings:

A breathable, adhesive-coated cloth backing that provides exceptional comfort for your patient.



PolyMem Cavity Wound Filler:

Will expand within the wound cavity to fill dead space, keeping the wound bed clean and moisturized while absorbing excess fluid. Also available with nanocrystalline silver (PolyMem Silver).



PolyMem Silver® Dressing

When selecting a dressing containing silver, clinicians' wound care goals are much the same as when not using a silver dressing: obtain and maintain a clean wound bed, absorb excess exudate, and provide moisture if the wound is dry, while also filling, covering, and protecting the wound. The silver difference is bioburden management.



These dressings were found to be the most absorptive silver-containing dressings of the six dressings tested independently.¹³ This same university-based team evaluated the dressings to determine which caused cell damage. The laboratory studies were selected to represent healing

dermal and epidermal tissue conditions. The researchers reported PolyMem Silver dressings performed very favorably in the testing. They also stated that the PolyMem Silver dressing

has less silver released into the carrier medium and thus it appears to be "locking-up" the silver in the dressing. This is potentially a very good feature of a silver-based dressing where the bacterial "kill zone" is in the dressing rather than in the wound, thus avoiding the "collateral" damage to the healthy cells within the wound¹³.

PolyMem Silver dressings have been used to help jump-start stalled wounds,¹⁴ manage wounds in patients prone to infection,¹⁵ and help manage infected wounds¹⁶ when the underlying cause of the infection has been addressed.

POLYMEM DRESSING SELECTION GUIDE

WOUND PHASE &
EXUDATE LEVEL



<p><u>NON-INFECTED</u></p>	<p>POLYMEM</p> <p><i>For initial days of PolyMem usage</i> POLYMEM MAX</p> <p>POLYMEM WIC + POLYMEM MAX</p>
<p><u>CRITICALLY COLONIZED, INFECTED, OR INFECTION RISK*</u></p>	<p>POLYMEM SILVER</p> <p><i>For initial days of PolyMem usage</i> POLYMEM MAX SILVER</p> <p>POLYMEM WIC SILVER + POLYMEM MAX SILVER</p> <p><small>*PolyMem Silver dressings are suitable to use when visible signs of infection are present. Proper medical treatment should be used to address the underlying cause of the infection.</small></p>
<p><u>CAVITY & UNDERMINING; TUNNELING</u> <small>USE ONLY ROPE (USED IN COMBINATION WITH ABOVE DRESSINGS)</small></p>	<p>POLYMEM WIC (NON-INFECTED)</p> <p>POLYMEM WIC SILVER AND POLYMEM WIC SILVER ROPE (CRITICALLY COLONIZED, INFECTED AND AT RISK)</p>

† If you have any doubt about the management, please contact your local specialist or refer to local guidelines. Always refer to Instructions For Use.

INITIAL PROTOCOL†

- Prepare the wound according to facility protocol or as directed by a physician
- **IMPORTANT:** Due to the hydrophilic nature of PolyMem, an increase in fluid output is likely to take place (this is a positive thing!). As a result:
 - » Change dressing more frequently the first 1 to 2 weeks, or
 - » Select a dressing designed for one fluid level higher than currently experienced
- Select a dressing with a membrane 0.6 cm - 5.0 cm larger than the wound size.
- If using PolyMem Wic wound filler, loosely apply to the wound cavity - cut the dressing 1/3 smaller than the wound diameter and depth as it will expand by 1/3 as it absorbs exudate. Use the appropriate PolyMem dressing for the secondary cover dressing.
- Mark appropriate wound margins on the back (printed side) of the dressing. Apply with the printed side out.

CHANGE PROTOCOL†

- **IMPORTANT:** Change dressing when the absorbed exudate reaches the approximate edge of the wound margins to help reduce the risk of periwound maceration or after 7 days - whichever comes first.
- If using PolyMem Wic, change before the wound fluid, visible through the top of the secondary dressing, reaches the approximate edge of the wound margin, whenever good practice dictates that the filler should be changed, or after 7 days - whichever comes first.
- IN MOST CASES, THERE IS NO NEED TO DISTURB OR CLEANSE THE WOUND BED BETWEEN OR DURING DRESSING CHANGES.



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