

Pressure Ulcers –

A global health concern^{1,2,3,4}



Among chronic wounds, pressure ulcers heal the slowest¹ and are most costly to treat. Prevention programs have resulted in a reduction in incidence as well as prevalence of pressure ulcers in some facilities.⁵ Modern moist wound dressings have been successful in decreasing costs.⁶

Pressure ulcers can develop within 2-6 hours of normal blood flow obstruction.⁴

Pressure, shear, and friction are the three major causes of pressure ulcers. However, shear and friction combined with moderate increases in moisture can make the skin more vulnerable to damage.⁷

Tissue damage, which leads to pressure ulcers, can occur due to:^{7,8}

- Intensity and duration of pressure^{7,8}
- Inability to tolerate pressure^{7,8}

Normal weight shifting should occur as the loss of oxygen in tissue is uncomfortable^{7,8} and healthy skin is more able to redistribute pressure.^{7,8}

Pressure ulcer risk factors can include, but are not limited to:

- Age due to less efficient nutrient system and less resistance to shear^{7,9}
- Increased body temperature^{1,7,8,10}
- Low blood pressure (systolic 100 & diastolic 60)^{7,10}
- Extended time on an operating table⁸
- Hypotensive episodes⁸
- Hemodynamic instability, unable to be turned safely⁹
- Psychological stress⁷
- Increased blood viscosity⁸
- Smoking^{8,11}
- Scarred areas^{7,8}
- Contractures¹¹
- Spasticity¹
- Use of external braces or appliances (e.g. wheelchairs)¹
- Obesity^{8,12}
- Diabetes which influences tissue perfusion¹
- Long-term care facility resident¹³

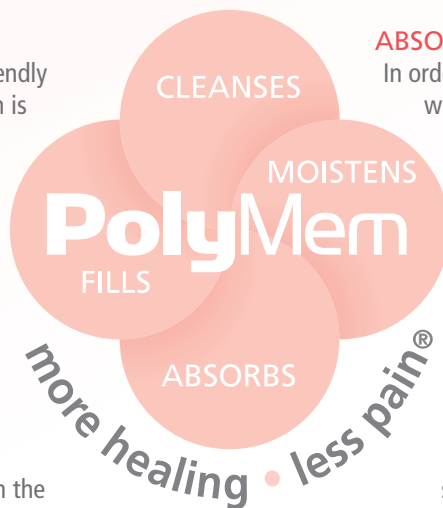
Built directly into each PolyMem® dressing, these four capabilities are ready when you need them - without incurring extra costs or needing additional supplies.

CLEANSSES

Contains a mild nonionic, nontoxic, tissue friendly cleansing agent, activated by moisture, which is gradually released into the wound bed. The built-in continuous cleansing capabilities usually eliminate the need to cleanse the pressure ulcer at dressing changes. This allows avoiding disruption of the growth of healthy new tissue, cooling the wound by rinsing, or causing pain during the dressing change process.

FILLS

Gently expands toward the wound to fill, conform, and remain in constant contact with the pressure ulcer, helping to maintain a moist wound healing environment. Primary dressings are available for pressure ulcers requiring fillers for cavity, undermining, or tunneling.



ABSORBS

In order to accommodate a full range of exudate levels, wicks up to ten times its weight in exudate from all stages of pressure ulcers. Use of a primary dressing under a secondary dressing can help to absorb additional drainage from highly exuding wounds and extend the wear time so there is less disruption of the wound bed.

MOISTENS

Keeps the wound bed moist and soothes traumatized tissues, helping to reduce wound pain and provide comfort at the pressure ulcer site, even through intact skin. The moisturizer also helps keep the dressing pad from adhering to the wound so it removes with virtually no pain or trauma, improving caregiver-patient interaction and the overall care experience.

PolyMem dressings also help to relieve wound and procedure-related pain through the synergistic effect of the dressing's components.

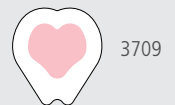
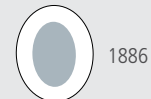
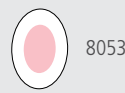
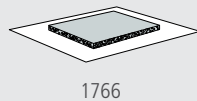
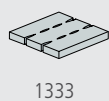
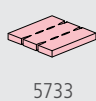
PolyMem is also available with our unique small particle, elemental silver for wounds which require additional protection from microbial contamination.

Why choose PolyMem dressings for Pressure Ulcers?

- PolyMem contains a mild, nonionic, nontoxic, tissue friendly cleansing agent which helps promote autolytic debridement at the pressure ulcer site and continuously cleanses the pressure ulcer while the dressing is in place. There is often no need for manual wound bed cleansing at dressing changes while using PolyMem dressings.^{14,15}
- PolyMem contains glycerol which helps to reduce foul odor, sometimes associated with pressure ulcers.¹⁶
- The glycerol and other components help to assure non-adherence of the dressing to the pressure ulcer site, helping to reduce procedure-related pain.¹⁶
- The synergistic combination of the PolyMem components helps to reduce inflammation and edema¹⁷ by inhibiting the nociceptor response¹⁷ at the pressure ulcer site, helping to reduce wound-related pain.
- PolyMem can be left in place on the pressure ulcer for up to seven days based on exudate levels.¹⁸ PolyMem is an “indicator dressing” and allows for assessment of the amount of drainage without removing the dressing and disturbing the wound bed.¹⁸ Clinical judgment should be used to determine time for dressing changes.
- PolyMem’s semi-permeable thin film backing helps to maintain the ideal temperature for healing (36°C)¹⁹ and helps to maintain the ideal moisture vapor transfer rate.²⁰
- PolyMem dressings are available with adhesive film borders, helping to protect the wound bed from possible contaminants, such as feces.²⁰
- PolyMem Silver® dressings contain small particle silver which helps to kill absorbed microorganisms and protect the wound bed from contaminants while reducing the risk of damage to the wound bed.²¹

PolyMem dressings are indicated for use on Stage I, II, III, and IV Pressure Ulcers. PolyMem dressings are available for use on any depth and for all levels of exudate.

Products especially well suited for pressure ulcer care:



| | Exudate level | None or Scant-Minimal | | Moderate-Heavy or Copious | |
|---------------------------------|-------------------------|--|-----------------------|---|-----------------------|
| | Depth of pressure ulcer | Cavities, Undermining, Tunnels | Less than 0.5 cm deep | Cavities, Undermining, Tunnels | Less than 0.5 cm deep |
| Appropriate PolyMem Dressing(s) | | PolyMem Wic Silver® Rope for cavities, undermining and/or tunneling; PolyMem Wic® cavity filler for cavities and undermining as well; Cover with PolyMem | PolyMem | PolyMem Wic Silver Rope for cavities, undermining and/or tunneling; PolyMem Wic cavity filler for cavities and undermining as well; Cover with PolyMem Max® | PolyMem Max |

Configurations that include silver are ideal when antimicrobial activity is desired.

EXAMPLES OF PRESSURE ULCERS

Stage III Scapula wound²²

Barriers to healing included:

- 90-years-old
- End-Stage Alzheimer's Disease
- Immobile and severely contracted
- Pain

One of three pressure ulcers; it is unknown how long the scapula pressure ulcer had been here.

The patient and healthcare professional noted the PolyMem dressings:

- Continuously cleansed
- Provided pain relief
- Promoted quick healing

PolyMem Wic cavity filler and standard PolyMem dressings were used to manage this wound through to closure.

Stage III Pressure Ulcer closed in six months with the use of PolyMem dressings!





Stage IV Sacral²³

Barriers to healing included:

- 85-years-old
- Diabetic
- Pneumonia
- Pain despite analgesics
» 10 on 0-10 scale
- 4+ pseudomonas

The wound needed surgical treatment to remove necrotic tissue (Sept 13 photo is after surgery).

PolyMem dressings were initiated on September 13.

The patient and healthcare professional noted the PolyMem dressings:

- Promoted quick healing
- Continuously cleansed
- Provided pain reduction (Pain was 0 on Sept 30)
- Provided additional protection from microbial contamination
- Provided optimal wound temperature
- Pseudomonas negative after one month, no antibiotics administered

PolyMem Wic Silver cavity filler, PolyMem Silver, and standard PolyMem dressings were used to manage this wound.

Stage IV Sacral Pressure Ulcer closed in just over 17 weeks of management with PolyMem dressings!

Stage IV Heel²⁴

Barriers to healing included:

- 60-years-old
- Alzheimer's disease
- Reduced mobility
- Dehydration
- Extreme pain despite daily medication
 - » constant 9 on 0-10 scale

The 8.0 cm x 6.0 cm, 2.0 cm deep wound had stalled after four months of treatment with Hyaluronic acid.

PolyMem dressings were initiated on April 11.

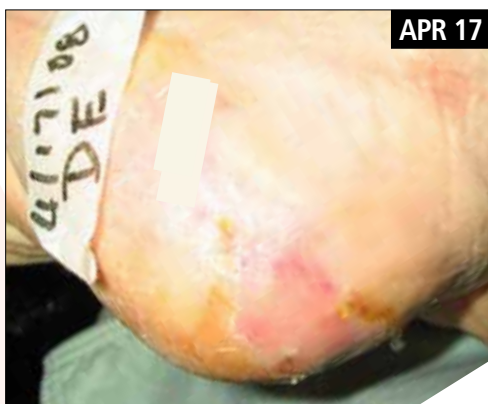
The patient and healthcare professional noted the PolyMem dressings:

- Provided pain reduction by the second week of management
- Continuously cleansed
- Promoted quick healing
- Reduced odor

PolyMem Wic Silver cavity filler, PolyMem Silver, standard PolyMem Wic cavity filler, and standard PolyMem dressings were used to manage this wound.

Unstageable Heel Pressure Ulcer closed in just 3½ months of management with a variety of PolyMem dressings!





Unstageable Heel²⁵

Barriers to healing included:

- 90-years-old
- Hypertension
- Morbid obesity
- Arthritis
- Hypothyroidism
- Urinary incontinence
- Venous insufficiency
- Steroid treatments

The 2.0 cm x 3.0 cm, 0.5 cm deep wound had been treated with a hydrogel for 18 days without improvement.

PolyMem dressings were initiated on February 4th.

The patient and healthcare professional noted the PolyMem dressings:

- Continuously cleansed
- Provided additional protection from infection
- Promoted quick healing

Shapes by PolyMem Silver[®] dressings were used to manage this wound through to closure.

Unstageable Heel Pressure Ulcer closed in just 10 weeks with the use of Shapes by PolyMem[®] dressings!

The goal is not to dress the wound... the goal is to heal the patient.

1. Baranowski S, Ayello EA. (2008). Wound care essentials: practice principles. Philadelphia, Lippincott Williams & Wilkins.
2. Maklebust J. (2005). "Pressure ulcers: the great insult." Nurs Clin North Am 40(2):365-89.
3. Meehan M. (2000). "Beyond the pressure ulcer blame game: reflections for the future." Ostomy Wound Manage 46(5):46-52.
4. ADA (2008) "Nutrition care manual." Volume, DOI.
5. Ayello EA, Lyder CH. (2007). "Protecting patients from harm: preventing pressure ulcers in hospital patients." Nursing. 37(10):36-40;quiz40-1.
6. San Miguel L, Torra i Bou JE, et al. (2007). "Economics of pressure-ulcer care: review of the literature on modern versus traditional dressings." J Wound Care. 16(1):5-9.
7. Krasner DL, Rodeheaver GT, et al. (2007). Chronic wound care: a clinical source book for health professionals. Malvern, PA, HMP Communications.
8. Bryant A, Nix DP, Eds (2007). Acute & chronic wounds current management concepts. St. Louis, MO, Mosby.
9. Langemo DK, Brown G. (2006). "Skin fails too: acute, chronic, and end-stage skin failure." Adv Skin Wound Care 19(4):206-11.
10. Bergstrom N, Braden B. (1992). "A prospective study of pressure sore risk among institutionalized elderly." J Am Geriatr Soc. 40(8):747-58.
11. Allman RM. (1997). "Pressure ulcer prevalence, incidence, risk factors, and impact." Clin Geriatr Med. 13(3):421-36.
12. Gallagher S. (2005). "The challenges of obesity and skin integrity." Nurs Clin North Am. 40(2):325-35.
13. Keelaghan E, Margolis D, et al. (2008). "Prevalence of pressure ulcers on hospital admission among nursing home residents transferred to the hospital." Wound Repair Regen. 16(3):331-6.
14. Yastrub D. Heel ulcer in hospice patient closed quickly using PolyMem Silver QuadraFoam dressings. WOCN 40th Annual Conference. Poster #2266. June 21-25, 2008, Orlando, FL USA.
15. Wilson D. PolyMem Silver dressings used to promote healing of multiple small stalled pressure ulcers to complete closure. 3rd Congress of the World Union of Wound Healing Societies. Poster #PF408. June 4-8, 2008. Toronto, Ontario Canada.
16. Foresman PA, Etheridge CA, Rodeheaver G. A wound dressing evaluation on partial-thickness rat wounds. Symposium on Advanced Wound Care Health Management Publications, Inc., 1991 Annual Meeting Poster Presentation.
17. Beltz AJ, Newman A, Kahn AR, Ruggles T, Eikmejer L. A polymeric membrane dressing with antinociceptive properties: analysis with a rodent model of stab wound secondary hyperalgesia. The Journal of Pain, February, 2004; 5(1):38-47.
18. PolyMem Instructions for Use. FMC-5935.
19. Thomas DR, Diebold MR, Eggemeyer LM. A controlled, randomized, comparative study of a radiant heat bandage on the healing of stage 3-4 pressure ulcers: a pilot study. J Am Med Dir Assoc. 2005 Jan-Feb;6(1):46-9.
20. Ratliff CR, Rodeheaver GT. Pressure ulcer assessment and management. Lippincott's Prim Care Pract. 1999 Mar-Apr;3(2):242-58.
21. Burd A, Kwok CH, Hung SC, Chan HS, Gu H, Lam WK, Huang L. A comparative study of the cytotoxicity of silver-based dressings in monolayer cell, tissue explant, and animal models. Wound Repair & Regeneration 2007 Jan-Feb; 15(1):94-104.
22. Aganthangelou C. Unique dressings provides nutrients for wound closure in a profoundly malnourished patient. NPUAP 11th Annual Biennial Conference. Poster #36. Arlington, VA USA.
23. Agathangelou C. Huge sacral pressure ulcer closed in four months using silver polymeric membrane cavity filler and dressings. NPUAP 11th Annual Biennial Conference. Poster #40. Arlington, VA USA.
24. Agathangelou C. Large necrotic malodorous pressure ulcer closed using unique silver dressings. NPUAP 11th Annual Biennial Conference. Poster #35. Arlington, VA USA.
25. Wilson D. Heel Pressure Ulcer in Non-compliant patient cleaned up quickly and closed in ten weeks. NPUAP 11th Annual Biennial Conference. Poster #44. Arlington, VA USA.



by PolyMem®
Shapes



Ferris Mfg. Corp.

5133 Northeast Parkway, Fort Worth, TX 76106 U.S.A.

Toll Free U.S.A.: 800.POLYMEM (765.9636)

International: +1 630.887.9797

www.PolyMem.com | www.PolyMemShapes.com

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