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

Activated by wound fluid...
- The PolyMem dressing will expand and gently fill the wound.
- The mild, non-ionic, non-toxic, tissue-friendly wound cleanser/surfactant and the glycerin incorporated in the dressing will be released to the wound bed, while the starch co-polymer and the foam will bind fluid in the dressing.
- The semi-permeable film cover will control moisture vapor transmission.

CLEANSES:
- Wound is continuously cleansed which minimizes the need for additional cleansing during dressing changes.
- Mild, non-ionic, non-toxic, tissue-friendly wound cleanser/surfactant is activated by moisture. It supports autolytic debridement by reducing interfacial tension between healthy tissue and non-viable tissue.
- Powerful absorbing agents help to draw the non-viable tissue from the wound into the dressing.

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.
- Glycerin is also recognized to help reduce odor and hypergranulation.

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.

ABSORS:
- 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.
- Powerful absorption properties help draw non-viable tissue into the dressing where it is easily discarded along with the dressing.

More Healing

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

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

Debrided pressure ulcer with communicating fistula infected with MRSA.

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

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

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

PolyMem is standard of care for donor sites at some facilities.
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.\textsuperscript{13,14} PolyMem dressings are non-adherent to the wound bed.\textsuperscript{13}

- Cleansing wounds is known to cause wound pain during dressing changes.\textsuperscript{14} 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.\textsuperscript{15}

The most common cause of pain in chronic wounds is tissue damage, which is referred to as nociceptive pain or inflammatory pain.\textsuperscript{16,17} Nerve damage is another cause of wound pain and is called neuropathic pain.\textsuperscript{16,17} Neuropathic pain is often experienced after chronic unrelieved nociceptive pain.\textsuperscript{16,17}

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.\textsuperscript{15} 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).\textsuperscript{17,18,19} 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.\textsuperscript{16,17,18,19,20} The spreading of the inflammatory reaction is often clinically evidenced by increased temperature, pain, bruising and swelling beyond the immediate zone of injury.\textsuperscript{17,20}

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{polymem ayuda.png}
\caption{POLYMEM HELPS REDUCE SPREAD OF INFLAMMATORY REACTION INTO SURROUNDING, UNINJURED AREAS}
\end{figure}

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.\textsuperscript{15}
Wrapping up patient care with one easy-to-use formulation...

...the complete solution to your wound care needs.