Integra[®] Bilayer Wound Matrix

CASE STUDIES





Description

Integra[®] Bilayer Wound Matrix is an advanced wound care device comprised of a porous matrix of cross-linked bovine tendon collagen and glycosaminoglycan and a semi-permeable polysiloxane (silicone) layer.

Indications

Integra Bilayer Wound Matrix is indicated for the management of wounds including: partial and full-thickness wounds, pressure ulcers, venous ulcers, diabetic ulcers, chronic vascular ulcers, surgical wounds (donor sites/grafts, post-Moh's surgery, post-laser surgery, podiatric, wound dehiscence), trauma wounds (abrasions, lacerations, second-degree burns, and skin tears) and draining wounds. The device is intended for one-time use.

Contraindications

The device is not indicated for use in third-degree burns.

Precautions

The following complications are possible with the use of wound dressings. If any of the conditions occur, the device should be removed: infection, chronic inflammation (initial application of wound dressings may be associated with transient, mild, localized inflammation), allergic reaction, excessive redness, pain or swelling.

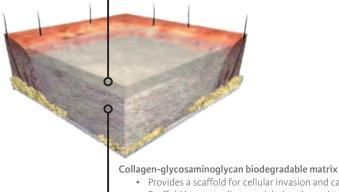
Benefits

- Provides immediate wound coverage
- Highly conformable for various anatomical sites
- Excellent performance in deep donor sites
- Exceptional strength and flexibility
- Room temperature storage
- Long shelf life

How it Works

Semi-permeable silicone membrane

- Controls water vapor loss
- Provides a flexible adherent covering
- Adds increased tear strength



- Provides a scaffold for cellular invasion and capillary growth
 Scaffold is eventually remodeled as the patient's cells
- rebuild the damaged site

Case Study 1

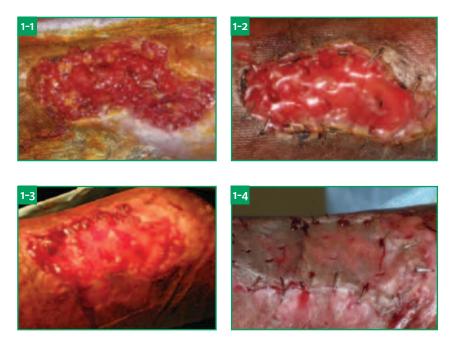
Type of Wound: Venous Stasis Ulcer

Patient: 62 year old female

Duration of condition: 6 years

A 62 year old female with HIV and a chief complaint of a venous stasis ulceration was treated for approximately 6 years with compression dressings, various wound dressings, and skin grafts (Figure 1-1). She was interested in attempting a new wound matrix which would potentially help her heal the chronic ulceration. Following vein ablation surgery, the patient's venous stasis ulcer was debrided down to the superficial fascia level. At this point, the Integra Bilayer Wound Matrix was cut to size, pie crusted, and stapled to the wound.

Following application of the graft, a silver impregnated dressing was used to cover the wound, followed by a sterile compressive dressing. At two (Figure 1-2) and three weeks (Figure 1-3), the dermal tissue is seen growing through the pie crusted silicone layer. It was at this time that a split-thickness skin graft was utilized to cover the Integra site (Figure 1-4). At approximately 6 months post-op, the patient is fully recovered without ulceration (Figure 1-5).





Case Study 2

Type of Wound: Chronic Wound, Vasculitis

Patient: 62 year old female

A 62 year old female was referred to the wound care center with ulceration to both of her feet and anterior ankles. The wounds were previously treated with operative debridements, followed by negative pressure wound therapy. Initial treatment included debridement of the wounds with incisional skin biopsy, followed by application of a split-thickness skin graft. The right foot healed uneventfully, while the left skin graft did not take. The pathology report suggested the etiology to be vasculitis (unidentified type). At this point, tendons were exposed in the wound, and the decision was made for further debridement with excision of the tendons (Figure 2-1), followed by application of Integra Bilayer Wound Matrix. Three weeks later, the Integra had taken and was flush with the skin; therefore, a split-thickness skin graft was again attempted (Figure 2-2). On second attempt, the skin graft had taken, and healed uneventfully (Figure 2-3).



Case Study 1 and 2 courtesy of: Dave Granger DPM, Kevin Roberts DPM, Richard Jay DPM, Mark Mantell MD, Paul Glat MD. The Graduate Hospital Wound Care Center, Philadelphia, PA 19146. Note: Each case study demonstrates Integra on one patient. Individual results will vary.

Case Study 3

Type of Wound: Diabetic Foot Ulcer

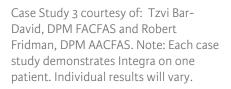
Patient: 67 year old male

A 67 year old male with a history of Type II diabetes and HIV, with a history of abscess and osteomyelitis of the left 5th metatarsal head, with subsequent resection of the metatarsal head. Approximately two years later he developed a contracted 4th hammertoe with retrograde plantar flexion of the 4th metatarsal (Figure 3-1). A grade II ulcer developed as a result of the increased pressure sub-4th metatarsal head (Figure 3-2). Local care and off-loading with orthotics did not resolve the problem. The ulcer was not clinically infected and there was no evidence of osteomyelitis radiographically and intraoperatively. Contraction of the digit was addressed with K-wire fusion of the hammertoe in conjunction with a Weil 4th metatarsal osteotomy that was fixated with Integra Spin® Screws (Figures 3-3 and 3-4). The ulcer was simultaneously debrided and Integra Bilayer Matrix was sutured externally (Figure 3-5). At 32-days post-operatively, there was increased uptake of the graft (Figure 3-6). Complete epithelization was achieved at 67 days, and one-year follow-up shows no regression of ulceration or contracture (Figure 3-7). The patient is fully active and uses custom-molded orthotics with ambulation.

















- Intega Bilayer Wound Matrix is supplied sterile, in single use, double peel packages containing phosphate buffer.
- Store flat at room temperature.
- For technical questions or reimbursement issues, please call 800-654-2873 or 609-275-0500
- For further technical training, please contact your local Extremity Reconstructive Sales Specialist.
- For more information, please visit www.ilstraining.com

Integra Bilayer Wound Matrix

Reference	Size	Units/Case
BMW2021	2in x 2in (5cm x 5cm)	1 sheet/box
BMW202	2in x 2in (5cm x 5cm)	5 sheets/case
BMW4051	4in x 5in (10cm x12.5 cm)	1 sheet/box
BMW405	4in x 5in (10cm x12.5 cm)	5 sheets/case
BMW4101	4in x 10in (10cm x 25cm)	1 sheet/box
BMW410	4in x 10in (10cm x 25cm)	5 sheets/case
BMW8101	8in x 10in (20cm x 25cm)	1 sheet/box
BMW810	8in x 10in (20cm x 25cm)	5 sheets/case

In a study of 107 patients having 158 documented individual ulcers, 92% of patients healed completely by Integra alone or with small subsidiary flaps (excluding poorly selected patients).¹

1. Gottlieb, Marc, M.D. and Jennifer Furman. Successful Management and Surgical Closure of Chronic and Pathological Wounds using Integra. Journal of Burns & Surgical Wound Care 2004, Volume 3, No. 4

For more information or to place an order, please contact: Integra = 311 Enterprise Drive, Plainsboro, NJ 08536 800-997-4868 USA = 609-936-5400 outside USA = 888-980-7742 fax Integralife.com