Endoform® helps to improve re-epithelialization after burn injuries

- **Endoform®** helps to facilitate tissue granulation and epithelialization in partial and deep partial burns.¹,²
- Weekly treatment of deep partial burns with **Endoform®** helped lead to 100% re-epithelialization of wounds after 11 weeks.¹
- Use of **Endoform®** may reduce the need for surgical skin grafting.²
- In a clinical study, Endoform treated wounds were not hypertrophic and the patients were satisfied by cosmetic outcomes.²

*By week 11, Endoform® treated burns are 100% re-epithelialized.*¹

**Endoform®** can be used at all phases of wound management

**CLINICAL EVIDENCE | Partial and Deep Partial Burns**

**Week 0:**

**Week 1:**

**Week 3:**

**Week 4:**

**Week 11:**
Endoform® Natural Dermal Template

Endoform® Antimicrobial Dermal Template

References:
CASE STUDY 19 | Bilateral Feet - Second Degree Burn

Patient: 77 year-old male with second degree burn.

Past medical history:
- Diabetic with peripheral neuropathy
- Second degree burn to bilateral feet due to prolonged standing by the pool area

Previous treatment:
- Hospitalized for debridement and antibiotic therapy
- Cellular tissue based products x 3
- After 3 applications of cellular tissue based products, there were 3 areas still open

Wound Treatment:
Endoform dermal template, Restore contact layer FLEX, Hydrofera Blue classic foam secured with stretch gauze. Dressings changed weekly per clinician's preference. At week 4, when drainage diminish to moderate amount, treatment was changed to Endoform dermal template, covered with Restore contact layer FLEX, Hydrofera Blue Ready foam, secured with stretch gauze. Changed weekly.

Wound measurements:
- Right forefoot: 6 cm x 5 cm x 0.5 cm
- Left heel: 1 cm x 1 cm x 0.3 cm
- Left forefoot: 5 cm x 3 cm x 0.5 cm

Week 0: Endoform application

Wound measurements:
- Right forefoot: 4 cm x 4 cm x 0.5 cm
- Left heel: 1 cm x 1 cm x 0.3 cm
- Left forefoot: 4.5 cm x 3 cm x 0.5 cm

Week 1:

Wound measurements:
- Right forefoot: 1 cm x 3 cm x 0.3 cm
- Left forefoot: 1 cm x 1 cm x 0.2 cm
- Left heel: Re-epithelized

Week 3:

Wound measurements:
- Right forefoot: 0.5 cm x 1 cm x 0.2 cm
- Left forefoot: 0.8 cm x 0.5 cm x 0.2 cm

Week 14:

All wounds 100% Re-epithelialized
Introduction:
Wound care affects 5.7 million people at an annual cost of $20 billion.1 A common dilemma for Burn Surgeons is balancing outcomes with cost of care. Frequently faced with deep partial thickness wounds post-surgical debridement, many utilize a dermal skin substitute or extracellular matrix. We recently discovered a collageous extracellular matrix (CECM) derived from ovine forestomach2 and indicated for partial and full thickness wounds. CECM dressings may help modulate matrix metalloproteases. An intact native extracellular matrix helps to promote tissue granulation3 and epithelialization for final wound closure.4

In this 4-case series, CECM dressings were used in the management of wounds with deep dermal deficits due to surgical debridement. The applicability of this option was used for early aggressive wound management to treat acute wounds.

Methodology:
A convenience sampling of 4 wounds and burns were selected. Patients who would be a potential candidate for a dermal skin substitute or a skin graft were chosen. CECM dressings were applied in the OR post-surgical debridement according to manufacturer’s instructions for use. Patients were followed through to wound closure.

Results:
All wounds proceeded to closure without complications. In 3 patients, wounds progressed to closure, not requiring surgical skin grafting. One patient required application of a skin graft for final wound closure.

Conclusion:
CECM is an intact, native extracellular matrix dressing which may facilitate tissue granulation and epithelialization for final wound closure. In this case series, three out of four patients did not require surgical skin grafting. The healed wounds were not hypertrophic and patients were satisfied by the cosmetic outcome.

Case Study 1:
Patient: 38 year-old female patient was undergoing a colposcopy; she sustained chemical burn to buttocks
Past medical history:
• Acute myeloid leukemia
Previous wound management:
• Silver sulfadiazine dressing QID
Current wound management:
• Day 18, post-injury, all wounds were debrided. CECM was applied to wounds post debridement per manufacturer’s guidelines

Case Study 2:
Patient: 21 year-old male with 3 full-thickness electrical wounds to left foot
Past medical history:
• Paraplegic secondary to spinal biffde
Previous wound management:
• Surgical debridement performed with placement of biayer matrix. IV antibiotics in hospital
Current wound management:
• CECM exposed with a non-adherent contact layer dressing changed weekly

Case Study 3:
Patient: 26 year-old male sustained 2nd degree thermal burn to right hand
Past medical history:
• Surgical debridement performed with placement of biayer matrix.
Current wound management:
• Surgical debridement performed 10 days post-injury. CECM dressing applied post debridement in the OR and covered with a non-adherent dressing and gauze wrap

Case Study 4:
Patient: 49 year-old male presented with cellulitis and a non-healing wound over right anterior tibia s/p fall
Previous wound history:
• Surgical debridement of wound; cellulitis treated with oral antibiotics
Previous wound management:
• Acute myeloid leukemia
Past medical history:
• Surgical debridement performed 10 days post-injury. CECM dressing applied post debridement per manufacturer’s guidelines

References:
3. Endoform® is a trademark of Aroa Biosurgery Limited. ©2018 Aroa Biosurgery Limited

* Endoform™ is a trademark of Aroa Biosurgery Limited. ©2018 Aroa Biosurgery Limited

** Manufacturer: Aroa Biosurgery. **

** Federal (USA) law restricts this device for sale by or on the order of a physician or licensed healthcare professional. Refer to Instruction for Use for contraindications, warnings, precautions and possible complications.

** Caution:** Federal (USA) law restricts this device for sale by or on the order of a physician or licensed healthcare professional. Refer to Instruction for Use for contraindications, warnings, precautions and possible complications.

©2018 Aroa Biosurgery Limited

** Financial Disclosure:** The author received an honorarium from Hollister Incorporated.

www.aroabio.com

Appulse