Multi-Center Evaluation of an Advanced Extracellular Matrix Technology for the Management of Chronic Wounds - A Canadian Experience

INTRODUCTION

The aim of this case series was to clinically evaluate an advanced extracellular matrix (ECM) technology across different Canadian care settings for the management of chronic wounds. ECM technologies work as a scaffold to help restore missing or damaged tissue. Unlike traditional collagen dressings, ECM is entirely natural, and is an accurate mimic of the scaffold found in healthy tissue. ECM contains collagen, but also a range of other secondary molecules that are important for healing. Additionally, ECM has been shown to modulate wound proteins.

METHODS

30 patients were recruited from three sites. Wound pathology included pressure ulcers, diabetic foot ulcers, skin tears, pleural effusions, necrotizing fasciitis, venous leg ulcers, dehisced abdominal and traumatic wound. Case settings included inpatient, outpatient, and home. All wounds were managed according to best practices, including debridement, maintenance of a moist wound environment, and appropriate compression and off-loading. All wounds were managed with ECM applied every 2-3 days to the wound bed. Wounds were visually inspected, imaged and measured over the course of management with ECM.

RESULTS

A total of 33 wounds (n=33) participants were enrolled in the study with different types of wounds, including 8 Ps. Most wounds showed improved healing rates and decreased frequency of dressing changes when managed with ECM compared to standard of care. Average times to wound closure was 52 days (from 19 to 133 days). Since hydrated ECM easily adhered to wounds and was easy to apply. No adverse events were observed.

Conclusions

This represents the first Canadian evaluation of an ECM for the management of wounds, including Ps. Improvements to the granulation tissue were observed, and otherwise stalled chronic wounds began to resolve. The availability of this advanced technology to Canadian wound specialists presents another tool for the management of these complex pathologies.

REFERENCES AND DISCLOSURES

Project was approved by Animal Experimentation Subcommittee of the Medical Research Institute of Victoria University, London, ON. ECM provided by Organogenesis Inc., Norwood, MA. This is a preliminary study. Further research is required. All data and results are from clinical practice. Patients were treated with ECM in accordance with the manufacturer’s instructions for use. ECM technology is a registered trademark of Organogenesis Inc. Requests for information about this technology should be directed to Organogenesis Inc., Norwood, MA.