The Combined Use of Integra and ReCell in a Case of Severe Hidradenitis Suppurativa

Mohammed S. Rais, BS<sup>1</sup>; Patrick A. Palines, MD<sup>2</sup>; Jonathon C. Boraski, DMD, MD<sup>2</sup>

1. School of Medicine, Louisiana State University Health Sciences Center; New Orleans, LA

2. Division of Plastic and Reconstructive Surgery, Louisiana State University Health Sciences Center; New Orleans, LA

## Introduction:

Hidradenitis Suppurativa (HS) is a chronic, inflammatory condition of the skin that primarily affects apocrine gland-rich areas. Severe cases of HS often require surgical intervention, but traditional methods pose challenges due to the extent of tissue excision and wound healing complications. Recent advancements, such as the use of dermal substitutes, like Integra, and autologous skin cell harvesting systems, like ReCell, have shown promise in improving outcomes in HS. This case report highlights a novel approach using both Integra and ReCell in a 35-year-old male with severe, grade 4 HS involving the gluteal and perianal regions.

## Methods:

The patient underwent a colostomy to reduce contamination risk and two staged excisions of the affected areas, followed by wound coverage with Integra to promote granulation tissue formation. After granulation, split-thickness skin grafting (STSG) was performed, supplemented by ReCell to enhance graft integration and healing. Detailed assessments were made regarding wound healing, graft take, and post-operative complications.

## **Results:**

The use of Integra in conjunction with ReCell led to successful wound closure in both gluteal regions with minimal complications. Both surgical sites showed robust granulation, with excellent graft take and no evidence of recurrence of HS to date. Healing outcomes were aesthetically satisfactory, with reduced hypertrophic scarring and contracture. The patient experienced minimal donor-site morbidity due to the ReCell system's ability to enhance healing by using smaller donor graft areas.

## **Conclusion:**

This case demonstrates the synergistic benefits of combining Integra and ReCell in managing severe HS. These therapies provide effective wound healing while minimizing donor-site morbidity and improving aesthetic outcomes. Despite promising results, further research is needed to assess the long-term durability and cost-effectiveness of these advanced treatments in larger cohorts of HS patients.