

The Faces of Autologous Skin Cell Suspension as Epidermal Grafts

CONCLUSION

AUTOLOGOUS SKIN CELL SUSPENSION (ASCS) AS AN EPIDERMAL GRAFT IS A VIABLE OPTION FOR COSMETICALLY IMPORTANT AREAS SUCH AS THE FACE.

RESULTS

- Five patients, aged 41-89 years, were included with TBSA ranging from 7-50%.
- Etiology of the burns included: flame from metal fabricating, assault followed by dousing the patient in gasoline and lighting on fire, flash flame from a water heater explosion, hot oil contact, and homeless encampment fire.
- Four patients had complete healing noted by POD #6 with excellent results.
- One patient developed mild microstomia and another developed ectropion which was treated with temporary tarsorrhaphy.
- All patients reported satisfaction with the cosmetic outcomes of their facial grafting.



SIGNIFICANCE STATEMENT

Facial burns are frequently severe and often difficult to skin graft, which may lead to increased morbidity including chronic pain, scarring, and psychosocial stigma. The aim of this study was to describe the outcomes of patients with facial burns who received ASCS as an epidermal graft.

DATA SOURCE/POPULATION

- A retrospective chart review of patients with facial burns admitted to an ABA Verified Burn Center from January 2019 to August 2019 was performed.
- All patients underwent tangential excision of superficial and deep partial-thickness burn wounds followed by ASCS applied as an epidermal autograft.
- The wounds were covered with a non-adherent dressing along with bismuth-impregnated, petroleum-based gauze.
- On POD #6 the dressings were removed and transitioned to an antimicrobial ointment applied to any remaining open wounds and/or a moisturizing lotion to all healed areas.

LESSONS LEARNED

This case series provides evidence for the validity of treating partial-thickness burns utilizing the above described protocol in conjunction with a multidisciplinary care team within a burn center.