Cosmetology-2013

OMICS Group Conferences
Accelerating Scientific Discovery

2nd International Conference and Exhibition on
Cosmetology & Trichology

November 12-14, 2013 DoubleTree by Hilton Hotel Chicago - North Shore, USA

Use of urinary bladder matrix, a bioactive, acellular scaffold along with platelet rich plasma (prp) in transplant donor scars and androgenetic alopecia: 5 year experience in hair duplication and hair loss prevention/non-surgical restoration

Gary S. Hitzig
Consultant in Regenerative Hair Restoration, USA

Abstract

Androgenic Alopecia is by far the most common cause of both male and female hair loss. By age 50, approximately one half of all men and one third of all women are affected by it. The causes are both inherited genetic and internal hormonal factors. However, the patterns occurring differ between males and females. Regenerative Medicine seeks to restore normal structure and function to tissues that are damaged. As I write this, investigators are making progress on bioengineering the hair follicle. Extracellular Matrix (ECM) is the secreted product of all cells occupying a specific tissue or organ. ECM is well known to have a powerful controlling effect on both the actions and appearance of specific tissue cells. It is in essence an "information super-highway" connecting the cells. For this reason, ECM is a biologic scaffold useful for tissue engineering in almost all body systems. ECM contains a diversity of highly structured proteins and bioactive molecules, as well as growth factors which act as potent modulators of cell behavior. Importantly, only ECM derived from the urinary bladder (UBM) contains an intact epithelial basement membrane allowing epithelial and associated appendages to develop. UBM (MatriStem-Acell) is an FDA-approved resorbable bio-scaffold material used successfully to repair musculotendinous structures, esophageal and vascular reconstruction, and most importantly for repair of full and partial thickness skin wounds. Because it is acellular, it has been shown not to contain antigenic stimuli and does not elicit an adverse immune reaction.

Significant anecdotal support for the benefits of UBM regenerative technology in hair restoration and hair loss prevention has been clearly demonstrated recently. It appears that UBM is functioning to recruit and signal local and circulating stem cells that may then initiate/promote folliculogenesis. Regeneration of hair after core "plug" excision has been demonstrated. In this demonstration, hair regrew in a biopsy punch site excision but only if surrounding hairs had suffered damage. This led to the concept that UBM heals by "re-modeling" the damaged area and uses damaged surrounding follicles as the model (architect) for reconstruction. The combination of ACell/Enhanced PRP has opened the door to both "rescuing" damaged or miniaturizing hairs as well as causing hair duplication. This entire process will be both discussed and illustrated.

Biography

In his 35 plus years of performing hair replacement surgery Dr. Hitzig has performed well over 40,000 hair restoration procedures. As both an innovator and inventor, Dr. Hitzig has pioneered the use of Infrared Coagulation in hair transplant surgery and recently patented "The Hitzig Linear Punch." Dr. Hitzig has had articles published in Dermatologic Surgery and the American Journal of Cosmetic Surgery on Adjuvant techniques in Punch Graft Hair Transplantation, Curvilinear Baldness Reduction, The use of Infrared Coagulation in Hair Transplant and Scalp Reduction Surgery, Linear Grafting Using a Modified Slot Method, and Auto Cloning of Beard Hair.

Since 1986 Dr. Hitzig has been a full fellow of the American Academy of Cosmetic Surgery and was the Co-Chair for the 1996 Hair symposium in New York City sponsored by the American Academy of Cosmetic Surgery and presented by the American Society of Hair Restoration Surgery. He has been the recipient of Multiple National and International Awards for both his surgical techniques and his inventions. He teaches Hair Restoration Surgery to physicians internationally. In the past, he has traveled throughout the U.S. and internationally, teaching both Basic and Advanced Hair Transplantation for N.P.I, an International C.M.E. accredited Medical Education provider.