



MEDICAL THERAPIES AND PHARMACOLOGY

GROWTH FACTORS: HARNESSING HEALING POWER, FROM RESTORATION TO REJUVENATION

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Since the Nobel Prize-winning discovery of nerve growth factor (NGF) and epidermal growth factor (EGF) in 1986, scientists and physicians alike have sought to understand and apply the physiological benefits of growth factors. In both healing and rejuvenation, tissue remodeling and systemic restoration, strides have been made in this regard. While the activity of growth factors and other elements of the cell secretome in response to acute wound damage are becoming increasingly well known, it remains a novelty to many that similar principles of restoration and remodeling repair can be employed for the sake of cosmeceutical rejuvenation. Within this domain, topical serums containing an intricate balance of growth factors, cytokines and other peptides have proven effective in reversing the signs of extrinsic aging. Those engineered peptides are now patented (U.S. Pat. 8,518,819). This study corroborates the idea that the topical application of growth factors and cytokines are beneficial in reducing the signs of skin aging of the face, including the area around the eyes. Moreover, growth factors have been shown to restore hair growth and slow down the progression of Androgenetic alopecia. Our study established the effectiveness of naturally occurring growth factors for anti-aging, skin rejuvenation, wound healing and for the first time in the treatment of hair loss.

