

Potentials of MSCs based serum in the treatment of skin psoriasis

Dr. Anand Srivastava, MS, PhD.
Chairman and Co-Founder
Global Institute of Stem Cell Therapy and Research (GIOSTAR)
Cellebration Life Sciences
Email: anand@gostar.com
4660, La Jolla Village Drive, San Diego, California-92122, USA

ABSTRACT

Psoriasis, a skin disease affecting approximately 100 million individuals worldwide is a chronic disease thought to be rooted in autoimmune origin, which is characterized by patches on the skin and nails. The underlying mechanism of the disease is not well understood but probably mediated by T-helper cells causing an upregulation in the levels of inflammatory cytokines leading to psoriasis often associated with an increased risk of psoriatic arthritis, lymphomas, cardiovascular risks, Crohn's disease, and depression.

Mesenchymal Stem Cells (MSCs) have been known to be immunomodulatory. In vitro also, these cells secrete anti-inflammatory cytokines like IL-4, IL-10, IL-11 and a number of cell growth factors in the media with the secretome. The secreted anti-inflammatory cytokines counteract the effects of increased levels of pro-inflammatory cytokines while cell growth factors may help heal the afflicted skin sections. GIOSTAR has developed a specific method to collect and process the stem cells-produced molecules in the conditioned media which has potential to counteract the effects of autoimmunity in psoriasis cases. Our own findings have demonstrated the curative properties of the MSC-conditioned media (MSC-CM) in such cases (Seetharaman et. al., 2019, <https://doi.org/10.1155/2019/8309103>). The topical application of the MSC-CM completely cured the psoriatic plaques in the treated patients. Our findings also demonstrate the therapeutic activity of MSCs-based serum which we used for successfully treating alopecia cases, a known autoimmune condition causing patches of hair loss demonstrating the curative properties of the MSC-CM in skin diseases rooted in autoimmune activity.

Biography: Dr. Anand Srivastava

Dr. Srivastava has been associated with leading universities and research institutions of USA. In affiliation with University of California San Diego Medical College (UCSD), University of California Irvine Medical College (UCI), Salk Research Institute, San Diego, Burnham Institute for Medical Research, San Diego, University of California Los Angeles Medical College (UCLA), USA has helped develop several research programs and has an extensive research experience in the field of Stem cell which is documented by more than 100 publications in revered scientific journals.

