Growth differentiation factor-15 (GDF-15) or macrophage inhibitory cytokine-1 (MIC-1) in skin diseases

Sevil Alan
Akdeniz University School of Medicine, Turkey

GDF-15 (Growth Differentiation Factor-15)/ Macrophage inhibitory cytokine-1 (MIC-1) is a member of the transforming growth factor β (TGF-β) superfamily. TGF-β/bone morphogenetic protein/growth differentiation factor family proteins are important regulators of cellular physiological processes, including cell survival, proliferation, differentiation, migration, and apoptosis. GDF-15 is has been reported to exhibit both tumorigenic and antitumorigenic activities. GDF-15 is regulated by p53 and highly expressed in melanoma cells. Furthermore GDF-15 is associated with oxidative stress, inflammation and histamine-induced melanogenesis. Some studies showed that GDF-15 level is increased in patients with systemic sclerosis and is related with the extent of skin sclerosis. Therefore measurement of serum GDF-15 may be useful for risk stratification in early disease stage. In the future, GDF-15/MIC-1 may be suitable for development as a serum diagnostic and is a possible target for the treatment of benign and malign skin diseases.

Biography

Sevil Alan has received her PhD from Ege University, Turkey during the period of 1993-1999. She completed her Dermatology Residency at the Adana Numune Education and Research Hospital in Adana, Turkey. Currently, she is working as a Dermatologist in Akdeniz University School of Medicine, Turkey. She is a editorial board member of journals like SM Dermatology, Dermatology & Pigmentation Disorders, and International Journal of Clinical Dermatology & Research (IJCDR). She is serving as a Reviewer for journals like JAMA Dermatology, International Research Journal of Public and Environmental Health, International Medical Journal of Sifa University. She has authored many research articles.

alan_sevil@yahoo.com