Neuronal Precursor Cell Expressed Developmentally down Regulated 4 (NEDD 4) gene polymorphism in keloid patients: A Clinical and Genetic study

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Abstract
Background: Keloids represent chronic fibroproliferative disorders of the skin which is characterized by excessive deposition of extracellular components especially collagen type 1, fibronectin and elastin. The exact aetiology of keloid formation is undefined but its development rests on genetic and environmental factors. Aim: to investigate NEDD4 (rs8032158) gene polymorphism in a sample of Egyptian patients having keloid. Patients and methods: The current case-control study was done on 80 subjects; 50 keloid patients and 30 ages and sex matched apparently healthy controls. All subjects underwent full history, weight and length measuring to calculate BMI, dermatological examination and analysis of NEDD4 rs8032158 (T/C) gene polymorphism using Real Time-PCR. Results: rs8032158 CC genotype was significantly observed in keloid patients and increased the risk for keloid development by about 4 times (p=0.038, OR=4.20) and was significantly associated with severe form of keloid (p<0.001). Moreover, C allele significantly increased the risk for keloid development by about 2 folds (P=0.028, OR =2.08). Conclusion: NEDD4 (rs8032158) gene polymorphism could participate in keloid formation in Egyptian population. NEDD4 (rs8032158) CC genotype may have a role in keloid severity.

Image:

Allergic discrimination plot of (rs8032158) gene polymorphism in both cases and controls (TT genotypes ( red dots), TC genotypes (green dots) and CC genotypes (blue dots)).

Biography:
Azza Gaber Antar Farag has completed her PhD at the age of 24 years from Menoufia University and Postdoctoral Studies from Menoufia University, Egypt. She is assistant professor, Dermatology, Andrology & STDs department, Faculty of Medicine, Menoufia University. She has published more than 30 papers in reputed journals and has been serving as an editorial board member of repute. She is a reviewer in many international journals.

Speaker Publications:
1.” Resistin adipokin in atopic dermatitis patients: A clinical, biochemical, and genetic study”Journal of Cosmetic Dermatology, Feb 2020
3.” Angiogenesis in involved and uninvolved skin of psoriasis highlighted by cluster of differentiation 34: an immunohistochemical study” Journal of Cosmetic Dermatology” Nov, 2019
5.” Interleukin-6 serum level and gene polymorphism in keloid patients” National Library of Medicine, April 2017

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