

The Association of Smoking and Body Mass Index with Acne Vulgaris in Adolescents and Young Adults

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Abstract : Background: Acne vulgaris is the most common skin condition that general practitioners and dermatologists encounter. It represents a chronic inflammatory disease affecting the pilosebaceous unit. Although acne vulgaris is not a life-threatening condition, it has a considerable psychological impact on the affected person. Acne patients have poor body image, low self-esteem, social isolation, and restricted activities. As part of the emotional impact, increased levels of anxiety, anger, depression, and frustration have also been observed in acne patients. (1) In this study, we want to assess the association between two modifiable risk factors; BMI and smoking, regarding acne vulgaris. Methods: A case-control study was conducted at King Abdullah University Hospital in Irbid, north Jordan in 2019/2020. A total number of 163 Acne cases were collected and interviewed by the author; on the other hand, there were 162 control cases. Anthropometric measures for Acne patients and control individuals were taken, and BMI was calculated. Both groups were asked about smoking habits. Data on subjects between 14 and 33 years of age were extracted. The characteristics of people who reported acne were compared with those with no acne using univariate and multivariate analysis. The Statistical Package for Social Sciences (SPSS) was relied on to analyze the collected data. The crosstabs methods (chi-square) and odd ratios were relied on to test the study hypothesis. Results: Cigarette smoking was highly associated with no-acne, with an odds ratio of 0.4 (95% CI: 0.2-0.9), P-value = 0.018. BMI and waterpipe smoking were not significantly associated with acne in the multivariate analysis. Conclusion: Cigarette smoking was found to be protective from Acne. No significant relation between BMI nor waterpipe smoking and the development of Acne Vulgaris.

Keywords : acne, BMI, smoking, case-control

Conference Title : ICDSD 2023 : International Conference on Dermatology and Skin Diseases

Conference Location : Miami, United States

Conference Dates : March 16-17, 2023