ACNE, ROSACEA, AND RELATED DISORDERS (INCLUDING HIDRADENITIS SUPPURATIVA)

DAIRY CONSUMPTION AND ACNE: A CASE CONTROL STUDY IN KABUL

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Background: Acne is one of the most common skin diseases in the world. Previous studies suggest that dairy consumption may contribute to the development of acne.

Objective: The aim of this study was to investigate the association of dairy consumption and acne in Kabul citizens.

Materials and Methods: A case control study was conducted among 279 acne patients and 279 controls aged 10 to 24 years from February to September 2018 at dermatologic outpatient department of Maiwand Teaching Hospital in Kabul City, Afghanistan. A pre-structured questionnaire was administered by a dermatologist to collect general socio-demographic information, personal habits, family history of acne, and food intake frequency. Global Acne Severity Scale was used to determine the acne severity. Univariate analyses were done by using Chi-square test and independent t test. Binary Logistic Regression Analysis was used to assess the strength of association between dependent and independent variables. Odds ratio (OR) and 95% confidence interval (CI) were calculated.

Results: The acne and control groups comprised 54.1% and 53.4% male respectively with an average age of 18.7 (SD 3.2) and 18.2 (SD 4.1) years. A history of acne in siblings was strongly associated with moderate to severe acne (OR 3.76, 95% CI 2.30-6.16). The risk was reduced in people doing physical exercise. No association with smoking emerged. The risk increased in those consuming whole milk ≥ 3 days per week (OR 2.20, 95% CI 1.29-3.77). The association was less marked for low fat milk than for whole milk (OR 2.05 CI 1.14-3.67). Consumption of chicken was associated with a protective effect (OR 0.26, 95% CI 0.14-0.47). Consumption of chocolate and chips was positively associated with acne.

Conclusion: This study shows association between high intakes of dairy products and acne in adolescence suggesting that dairy consumption may be a factor contributing to acne.