

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

## THE ROLE OF SMOKING HABIT ON HIDRADENITIS SUPPURATIVA PATIENTS

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Background: Hidradenitis suppurativa (HS) is a chronic, inflammatory, recurrent, debilitating follicular skin disease that has a great impact on the patient's quality of life. The pathogenesis of HS is not completely understood. Tobacco smoke is epidemiologically associated with HS and it may contribute to the disease beginning by several ways.

Objective: To investigate the association and role of smoking on HS patients.

Methods: One-hundred-eight patients with mild, moderate, severe HS were included in this retrospective study. Demographic and clinical data of all patients were collected. Sixteen patients were treated with topical clindamycin, eighty-three with oral antibiotic therapy (mono or combined) and nine with adalimumab. Clinical and ultrasound evaluation were done at the treatment beginning and after 8 weeks of therapy. HiSCR was used, where applicable, to evaluate the treatment response. Statistical analysis was performed using logistic binomial and multinomial regression to evaluate the correlation among smoking habit with sex, age of onset, BMI, IHS4, DLQI, Pain Vas, lesion type, presence of Power Doppler signal and HiSCR achieving.

Results: In 108 patients, 68 female and 40 male, 75 were current smokers (28 male and 47 female) and 8 former smokers. Age of onset was similar between smokers and no smokers. No correlation was found among smoke with sex, age of onset, BMI, IHS4, Pain Vas, lesion type, presence of Power Doppler signal or reduced HiSCR achieving. Finally, the only correlation found was between smoke and higher DLQI.

Conclusion: These data suggest that HS is a complex disease, arising from a complex interplay between genes, immune system, adiposity and environmental factors besides smoke. However, smoking habit showed a significant correlation with high DLQI. This data suggests the presence of a dangerous self-sustaining circle between HS and low quality of life that is associated with higher odds of smoking habit.





