

Effects Of Smoking On Hair Loss

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Introduction

Hair loss, also known as alopecia can be caused by a variety of factors like hormonal changes, medical conditions, medications, nutritional deficiency stress and also smoking. The underlying biological mechanism that may link smoking to hair loss are not yet fully understood, but it is thought that smoking has a negative impact on blood supply to hair follicles. Significant association between smokers having a higher risk of developing hair loss compared to non-smokers. Furthermore the study also shows a positive correlation between smoking and male pattern baldness which is a common type of hair loss in men. The management and prevention of hair loss from smoking require various level of intervention. Individual level intervention like abstaining from smoking, increasing awareness among youth regarding the effects of smoking. Similar recommendations on the community level and country level like banding cigarettes, taxation of tobacco products, smoking cessation program like camping and nicotine replacement therapy.

Keywords: smoking, hair loss, alopecia, baldness, marijuana, tobacco.

Introduction

Tobacco smoking is the practice of burning tobacco and ingesting the resulting smoke. It is a harmful habit that involves inhaling smoke from cigarettes, cigars and pipes. Smoke contain many harmful chemicals including tar, carbon monoxide and nicotine which are risk factor for preventable morbidities including cardiovascular and pulmonary disease, malignancy oral mucocutaneous, reproductive system, skin and hair appendages. More recently, role of smoking in skin aging and hair loss has been great topic of interest in research and its role has been long debated. (1)

In Conclusion: smoking causes dangerous effects on cardiovascular system, respiratory system, cancer and reproductive system, affecting not only the major organ but also on skin and hair, quitting smoking can not only improve your overall health but also help reduce hair loss and improve the effectiveness of hair loss treatment like minoxidil. In my opinion, the prevalence of hair loss among smoker was higher than nonsmoker. Avoiding smoking or quitting would be the best option for overall health conditions because "every quitter is not a loser some are winners".

The chemicals in cigarette can damage the hair follicles and reduce blood flow, in addition hair bulbs exposed to oxidative stress tend to be increased vacuolated which causes the increase reactive oxygen species and oxidative stress around the hair follicle, which leads to the damage to melanocytes and decrease melanin production. (2) (3)

Mechanism of action

Smoking induced hair loss is caused by Vasoconstriction caused by smoke metabolites. The retention of DNA adducts that lead to DNA damage. Oxidative stress and sustained micro inflammation. (4)

Patients/methods: For this study, one thousand (1000) healthy males aged 20 to 35 years, who were not complaining of any local scalp condition and free of any mental illness, were recruited and divided into two groups of 500 each based on their smoking habits. Androgenetic alopecia was classified according to the Hamilton baldness scale, trichoscopy was also used to confirm the diagnosis of AGA. Designed questionnaire to determine basic physical and smoking habits completed and the results was interpreted and analyzed.

Results: Of the smokers, 235(47%) had grade III AGA, and 120 subjects (24%) had grade IV AGA. Of the non-smokers, 100 subjects (20)% had grade II AG. (5)

Prevention strategies for tobacco control

- Educating and raising awareness of people about the adverse effect of smoking not only on heart, chest and reproductive system but also on hair and skin.
- Banning industries and markets that supply cigarettes.
- Monitoring tobacco use and prevention policies in each country, like taxation of tobacco products, smoke-free policies in certain places, and decreasing second hand smoke.
- Offering smoking cessation programs to those who have hard time quitting through nicotine replacement therapy, medication and support group.
- Campaigns specially targeting the young age group from where the initiation of smoking tends to get started.

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