

Significant Hair Regeneration in Androgenetic Alopecia observed with Unani Treatment

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Abstract: *Androgenetic alopecia (AGA) is the most common type of hair loss that affects an equal number of men and women and is clinically characterized by progressive baldness. In India, the prevalence of AGA in men aged 30-50 is 58%. AGA is not only limited to cosmetic problems but also leads to several psychological issues like low self-esteem, embarrassment, frustration, and jealousy. The present case study illustrates a possible option to treat AGA with Unani formulations along with a novel therapeutic procedure based on the fundamentals described in the classical literature of Unani medicine. Significant regeneration of new hair was observed compared to baseline in three patients of AGA aged between 26-30. The outcome of this concise study suggests that local Unani formulations along with Hair Rejuvenation Therapy (HRT) can provide noteworthy relief in AGA and will provide a stimulus to carry out larger randomized trials to further validate the results.*

Keywords: Androgenetic alopecia, Hair loss, Hair rejuvenation, Hair growth, Unani medicine

Abbreviations: Androgenetic Alopecia (AGA), Hair Rejuvenation Therapy (HRT).

1. Introduction

Hair loss is a most common cosmetic problem and is usually associated with many psychological disturbances, distress, and depression¹. Androgenetic alopecia (AGA) is the most common type of hair loss¹ affecting the same number of men and women² and is clinically characterized by progressive baldness. It affects approximately 30% of white men by the age of 30 years and 50% by the age of 50 years³. AGA is a disease caused by multiple factors⁴, the miniaturization of hair follicles caused by the effects of androgen hormones in genetically predisposed individuals is the main factor; however, the exact cause remains unknown. It represents a progressive reduction in the diameter and length of the hair shaft¹ caused by shortened anagen phase². These miniaturized hairs are characteristic of AGA¹. One-third of individuals with a strong family history of AGA can expect to be affected by it. Hair shaft thinning usually begins between 12 and 40 years of age and 50% of the population experiences some degree of thinning before 50 years. The pattern of hair loss is quite variable².

This case report is aimed to describe the potential of classical fundamentals of Unani medicine in the management of AGA. The Unani system of medicine is one of the oldest systems of medicine. In India, among other traditional medicine systems, the Unani system of medicine is very popular and has gained recognition in recent years⁵.

In the classical literature of Unani Medicine, it is mentioned that the accumulation of morbid materials beneath the skin is one of the common causes of hair loss besides other factors like nutritional deficiencies, fibrosis after injuries, certain infections, and loss of skin firmness (6). In the treatment section, ancient Unani scholars have emphasized the evacuation of that accumulated morbid materials through small openings created by any fine object⁶. In Unani classical literature, a

method called “ILAM (pain induction in a particular tissue or organ)” is described to regain the lost power of the targeted tissue⁷. In the case of the scalp, it may be the regeneration of hair follicles by restoring the volume of the dermal papilla (DP) and transforming growth factor (TGF). DP volume and different growth factors play an important role in the morphogenesis and regeneration of hair follicles. Dysregulation of these growth factors is the trigger factor for alopecia⁸. Keeping both these points, evacuation of morbid materials and ILAM, in the mind a new therapeutic procedure named hair rejuvenation therapy (HRT) to stop hair fall and regrow hair was designed. Three remarkable cases of hair regrowth achieved with a treatment regimen based on HRT and Unani formulations for local application are presented.

The procedure of HRT:

First, after taking aseptic measures and applying 10% Lidocaine, micropunctures were created on the scalp with the help of microneedles (1.5-2.00 mm in length), and then a negative pressure of .08 MPa was created for a brief time (5-10 sec.) to create pinpoint bleeders. Microneedle causes ILAM (Mild pain), and according to the Unani system of medicine, evacuation of morbid material (Istefragh) occurs through microbleeds⁹. Mild pain was experienced, but no burning or other severe discomfort was experienced by the patients. After completion of the procedure, no pain or any other untoward effect was reported by the patients.

2. Case Presentation

Three patients with AGA between the ages of 26-30, having stage 2 (Fig. 1 A) stage 3 (Fig. 2 A), and stage 4 (Fig. 3 A) on Norwood scale were treated at the outpatient department level. After a careful history and physical examination, the patients were diagnosed with AGA cases. The patients received traditional Unani herbal oils, Roghan-e-zarareeh¹⁰ 10 ml mixed

with 25 ml of Roghan-e-baiza-murgh,¹⁰ for local application on an alternate night and were advised to use any mild shampoo with a conditioner the next morning. Cold water maceration of Zulamla, a polyherbal herbal Unani hair pack of Hamdard laboratories, was recommended for local application on the scalp 30 minutes before bath once a week on non-shampoo days. For cold water maceration, it was advised to soak 10 g of zulamla powder in 50 ml of plain water for 8 hours and then filter with a fine cotton cloth. Initially, 3 sittings of HRT were done at an interval of 7 days, after third sitting all three patients experienced a reduction in hair fall. Then 4 HRT sittings (After achieving the primary goal which is to minimize hair loss; the time interval between sessions was increased to make the procedure feasible for the patients) were performed every fortnight.

3. Discussion and Conclusion

A significant change was experienced in the thickness, and color of the hair observed by the patients after the 4th sitting. Photographs of the patient's scalp 15 days after completion of the last that is the 7th sitting (Fig. 1 B, 2 B and 3B) show significant regeneration of new hair compared to baseline (Fig. 1A, 2A and 3A).

In conclusion, the effectiveness of HRT along with the local application of Unani formulations was observed in patients with androgenetic alopecia. Since it was a concise study that included only 3 cases, hence, I emphasize the preliminary nature of the findings and can not generalize the results to the whole population. I recommend further RCTs to be conducted on this regimen tested to get the concrete evidence.

Consent to participate:

This report includes three patients with AGA. All three patients had been informed of this study, and voluntarily provided written consent.

Consent for publication:

All three patients agreed to the publication of their cases.

Acknowledgment:

I am very grateful to the subjects involved in the study and to the head of the institution for providing the necessary infrastructure for therapy.

Source of funding: None

Conflict of interest: None



Figure 1: Gross Images demonstrating hair regrowth in a male patient of 26 years with AGA before (A) and 13 weeks after (B) Unani treatment.



Figure 2: Gross Images demonstrating hair regrowth in a male patient of 26 years with AGA before (A) and 13 weeks after (B) Unani treatment



Figure 3: Gross Images demonstrating hair regrowth in a male patient of 27 years with AGA before (A) and 13 weeks after (B) Unani treatment.

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