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Case Study

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EFFICACY OF ROGHAN-I-CHAMELI (JASMINE OIL) IN THE MANAGEMENT OF INTITHAR AL-SHA'R (DIFFUSE HAIR LOSS): A CASE REPORT

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ABSTRACT

Diffuse Hair Loss (DHL) is characterized by excessive hair loss from the scalp without bald spots, inflammation, or scarring, resulting from a disruption in the hair growth cycle. In the Unani system, this condition is termed Intithar al-Sha'r, with historical insights from scholars like Dioscorides, *Ibn Māswayh*, and *IbnSīnā*, who identified poor production of bukhārāt-i-dukhāniyya as a primary cause. This leads to *yabūsat*, which compromises skin integrity and facilitates hair shedding. This case report details a 16 year old female diagnosed with Diffuse Hair Loss (DHL), who received local treatment of 10 ml of Roghan-i-chamelī on the scalp on alternate days for six weeks. The treatment's effectiveness was assessed using Hair Shedding Visual Scale (HSVS) and Dermatology Life Quality Index (DLQI) before and after intervention. Significant improvements were noted in both scores post-treatment, indicating effective management of DHL. This case highlights the relevance of Unani medicinal practices in treating DHL and suggests that traditional approaches can lead to substantial clinical improvement.

KEYWORDS: Diffuse Hair loss, *Intithāral-Sha'r*, *Roghan-i-chamelī*, HSVS, DLQI, Unani Medicine.

INTRODUCTION

The most prevalent form of Diffuse Hair Loss (DHL) is telogen effluvium (TE), a condition characterized by the premature termination of the anagen phase in the hair cycle, leading to diffuse shedding of club hair. This condition affects individuals globally, with a higher incidence observed in women. [1] TE can manifest as acute, chronic, or chronic diffuse telogen hair loss. Common triggers include fever and various medical conditions, which cause hair follicles to shift prematurely from the anagen to the telogen phase. Excessive hair shedding typically occurs about three months after the transition to telogen, with daily losses ranging from 100 to 1,000 strands. [2,3] In the Unani system of medicine, hair loss is categorized under Intithār al-Sha'r. [4] The term "Intithār," derived from Arabic, refers to falling leaves from a tree, while "Sha'r" means hair, [5] together aptly describing hair loss. The primary cause of Intithār-al-Sha'r is insufficient production of bukhārāt-i-dukhāniyya due to underlying medical conditions, which accumulate in the $mas\bar{a}m\bar{a}t$ and lead to hair thinning and loss. Additionally, other causes include *Mutakhalkhul-jild*, khuskhīwakasāfat-e jild, Daufharāratgharīziyya, and taghayyur mizā i. [6]

The true incidence and prevalence of telogen effluvium remain unclear due to the preclinical nature of the condition. It does not show any racial preference and affects both males and females, although it is more commonly reported in women. This higher incidence in females is likely because they are more likely to find hair shedding distressing, leading them to seek medical attention more frequently than men.^{[1][2][3]}

Conventional medicine lacks specific treatments for this condition; however, corticosteroids and FDA-approved Minoxidil are commonly used to mitigate hair loss, despite potential side effects like itching, erythema, and rashes. Innovative cosmetic therapies such as Stemoxydine and CNPDA (Caffeine, niacinamide, panthenol, Dimethicone and Acrylate polymer) have been reported, though their effectiveness is not well established. Therefore, there is a pressing need to explore alternative therapies that could effectively control hair shedding with minimal adverse reactions. In this case study, the patient was treated with *Roghan-i-chamelī* also known as *Roghan-i-Yasmīn*, a remedy suggested in Unani literature for managing DHL. It has *Murratab* (humectant), *Da'fiasardard* (Anti-headache) and *Muqawwīsh'ar* (hair tonic) properties. [8]

MATERIAL AND METHODS

Case report

A 16 year old girl visited the outpatient department of RRIUM in Srinagar, primarily complaining of hair loss that had persisted for three months. She did not have any nutritional deficiencies, thyroid issues, polycystic ovarian syndrome, or a history of weight loss. Her family history showed no signs of androgenetic alopecia. Upon examination, her hair loss was diffuse, characterized by thinning of scalp hair, with no lesions on the scalp or widening of the central part. Her hair was medium-length, black, and had an oily texture. The hair pull test was positive at all sites on the scalp. Her nails, eyebrows, eyelashes, and body hair appeared normal.

The patient received outpatient treatment and underwent a comprehensive evaluation. During the general examination, the patient was found to be alert, oriented, and in good health. They had an average physique with a fair skin tone, height 146 cm and weighing 45 kg, having a BMI of 21.1 kg/m². There were no signs of pallor, jaundice, or palpable lymph nodes. Vital signs were stable, with a pulse rate of 78 beats per minute, a temperature of 97.8°F, a respiratory rate of 16 breaths per minute, and blood pressure readings of 110 mmHg systolic and 70 mmHg diastolic. The cardiovascular, respiratory, and nervous systems were all normal during the initial assessment. Written informed consent was obtained from the patient.

Diagnostic Assessment and Follow-up

The HSVS was used to evaluate hair loss, while the DLQI^{[9][10]} assessed the patient's quality of life. Baseline investigations were conducted. The patient's blood investigations show Hb-10.7 g/dl, while the TLC and DLC are within normal ranges. With the patient's consent, treatment commenced with a local application of 10 ml of *Roghan-i-chamelī* on the scalp on alternate days for six weeks. The effects of this local Unani formulation were compared with objective measures, specifically the HSVS and DLQI, before and after the treatment.

Therapeutic intervention

Table 1: Showing compound formulation for topical use with their composition.

Unani name	Scientific name	Part used	Quantity
Gul-i-Chamelī	Jasminum grandiflorum L.	Flower	10 g
Roghan-i-Kunjad	Sesamum indicum L.	Seed	100ml

Hair care

1. Always wash hair with clean, cold water.

- 2. Avoid using warm water for washing hair.
- 3. Regularly apply oil to the scalp.
- 4. Comb hair only after it has dried post-wash.
- 5. Limit the use of heat on hair.
- 6. Avoid tight hair ties.
- 7. Don't braid hair tightly at bedtime.

OBSERVATIONS AND RESULTS

The effects of the intervention were recorded every 15 days over three consecutive followups. The HSVS and DLQI scores showed significant improvement, decreasing from 10 and 16 at baseline to 01 and 01 by the end of treatment, respectively, and there were no adverse effects noted.

DISCUSSION

The patient's improvement may stem from the pharmacological properties of the ingredients in *Roghan-i-chamelī*. This formulation contains *Jasminum grandiflorum* L., whose flowers have been traditionally acknowledged for their effects as a central nervous system depressant, mild anesthetic, astringent, and sedative, as highlighted in a study by Musaddique et al. (2013). Which is in accordance with the description of ancient Unani Physicians that *Chameli* (Jasminum grandiflorum L) i has *Qabiz* (Astringent) properties which helps in preventing *Intishar ash'er*(Hair fall). Additionally, research by Zhao et al. (2008), Ning et al. (2013), Zhao et al. (2013), and Guo et al. (2014) has identified various compounds in these flowers, such as flavonoids, iridoids, saponins, and sesquiterpenes, that demonstrate biological activity. Sesame oil is also included for its anti-inflammatory, analgesic, laxative, emollient, obstructive, resolvent, diuretic, and vasodilator properties. [12]

CONCLUSION

Roghan-i-chamelī was proven to be safe and effective in reducing hair fall and enhancing the overall health of hair. This case study demonstrates successful management of *Intithār al-Sha'r* (Diffuse Hair Loss). Unani treatment for *Intithār al-Sha'r* shows significant potential in addressing the underlying causes of this condition. The recovery observed in this case was encouraging and merits documentation.

Abbreviations: Diffuse Hair Loss (DHL), telogen effluvium (TE), Hair Shedding Visual Scale (HSVS) and Dermatology Life Quality Index (DLQI)

Compliance with ethical standards

Acknowledgement

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Conflict of interest

There are no conflicts of interest to declare.

Statement of informed consent

The patient involved in the study provided informed consent.

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