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Successful Treatment of Chronic Scalp Seborrheic Dermatitis Using Traditional Persian Medicine: A Case Report and Literature Review

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Abstract

Background: Seborrheic Dermatitis (SD) is a common, chronic and relapsing disorder caused by changes in the cutaneous microflora. This disease is called *hozaz* in traditional Persian medicine (TPM). Topical application of *Althaea officinalis* L. in combination with vinegar has been traditionally recommended for treatment of this disease. **Case Report:** This paper presents long-term remission of resistant SD in a 32-year-old female patient with topical application of *A. officinalis* in combination with vinegar, as well as the TPM's healthy lifestyle advice and dietary recommendations. **Conclusion:** This remarkable clinical experience suggests that further research should be conducted on the effect of *A. officinalis* and TPM's recommendations in the treatment of SD. [GMJ.2017;6(2):157-59] DOI: 10.22086/GMJ.V6I2.706

Keywords: Seborrheic Dermatitis; Traditional Medicine; *Althaea Officinalis*; Dermatology

Introduction

Seborrheic Dermatitis (SD) is a common chronic and relapsing disorder caused by changes in the cutaneous microflora or changes in the host immune function. The incidence of SD is up to 42% [1]. The most common age in which SD occurs is during the first three months of life, puberty and between 40 to 60 years of adulthood [1]. The etiology of this disease has not been clearly demonstrated, but recent investigations have focused on the pivotal role of *Malassezia*. So far, no satisfactory treatment exists for SD [1]. There are several risk factors for SD, such as adults' age specially 30-50 years old, female sex, obesity, stress, tobacco and alcohol consumption, and

also common chronic diseases like hypertension, coronary heart disease, diabetes mellitus, and chronic renal failure [2].

SD is like a defined disease, named "*hozaz*," in Traditional Persian Medicine (TPM) [3]. According to TPM, the appearance of small size scale- and scurf-like bran (*saboos*) on the skin and hair of the head is the most significant sign of this disease [3].

It is stated that these scales are not associated with any sore [3]. Several risk factors are presented for *hozaz* in TPM. For instance, this disease occurs in young adult more than adulthood, and also, choleric temperaments (*Mejaz-e-Safravi*) and history of continuous consumption of hot nature foods and drugs are associated with it [3, 4]. Several etiologies are

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described for this disease in TPM including burned bile humor (*Safray-e-Mohtareghe*), blood humor plethora (*Ghalab-e-Dam*), salty phlegm humor (*Balgham-e-Maleh*), and blood mixed with soda humor (*Dam-e-Sodavi*) [3]. Avicenna (980-1037 AD) suggested that *hozaz* was the result of inappropriate changes in temperament (*Fesad-e-Mezaj*) in the external layer of the head and/or the whole body due to *Balgham Booraghi* (salty phlegm) or *Dam-e-Sodavi* (blood mixed with soda humor) [4]. Several remedies are recommended for the treatment of *hozaz* in TPM. *Althaea officinalis* L. (named *khatmi* in TPM) is a plant with multiple medicinal effects according to *Makhzan al-Adviya* (the storehouse of medicaments by *Aghili Shirazi*, the 18th-century great physician) [5], in the treatment of skin and hair diseases including *hozaz*.

According to this book, topical application of *A. officinalis* together with vinegar is useful for treatment and elimination of toxins from the skin [5].

In this paper, we present a female patient with chronic SD and resistance to usual treatments; she was treated successfully with the approach mentioned above.

Case Presentation

A 32-year-old otherwise healthy woman suffering from severe SD in her scalp for the past 12 years was referred to TPM Clinic, Shiraz University of Medical Sciences, Shiraz, Iran. She was treated by several dermatologists and internal disease specialists, with the diagnosis of SD and used several topical corticosteroids and antifungals, with only partial and temporary effects. Past medical history was unremarkable. On physical examination, blood pressure was 110/70 mmHg, respiratory rate 18 per minute, temperature 36.80C, and pulse rate 70/min. General physical examination was unremarkable.

The patient was instructed to take a topical product of 50 grams of powder of *A. officinalis* dry leaf mixed with 5cc grape vinegar in lotion form on her head for 20 minutes twice weekly for one month. No other drug was prescribed for the patient.

She was also recommended to respect healthy

lifestyle based on TPM, including suggestions to avoid fast foods, industrial drinks, canned foods, frizzy foods, and chili or salty foods as well as attention to restful sleep and avoidance of constipation [4].

In the one-month follow-up, the patient mentioned that the scurf was removed from her scalp like a thick cradle cap after topically applying *A. officinalis* for 20 minutes for just two times. She reported moderate redness of her scalp for a few minutes following application without any burning or itching sensation. The patient did not continue using the topical preparation after improvement, i.e., more than twice.

In the four months' follow-up, a complete response was noticed. No scaling, itching, and erythema were noted on physical examination of the scalp.

Discussion

SD is a relapsing and chronic form of dermatitis [2]. The severity of this disease varies from mild and is limited to the scalp to diffuse involvement of the seborrheic areas of the body [6]. Dandruff is limited to the scalp, but SD can involve the scalp as well as other seborrheic regions with different signs and symptoms, including pruritus, mild to moderate inflammation, and flaking of the skin [1]. *Hozaz* is a disease with most similar symptoms to SD in TPM. These include the appearance of small size scale and scurf-like bran (*saboos*) on the skin and hair without ulceration [4].

According to TPM, *hozaz* occurs in choleric temperaments (*Mejaz-e-Safravi*), and consumption of hot natural foods and drugs, based on TPM knowledge are associated with it [4].

Several studies have evaluated the pharmacologic effects of *A. officinalis*. Rezaei *et al.* have demonstrated wound healing and antibacterial effects of *A. officinalis* in a rat model [7]. Another study has confirmed its antibacterial effect [8].

Antioxidant effect of its root is also demonstrated. Anti-inflammatory and antifungal effects of *A. officinalis* were demonstrated in an *in vivo* study by Korbekandi *et al.* [9]. These anti-inflammatory and antifungal effects jus-

tify its use for treatment of SD. There is no report on its side-effects or drug interaction. *A. officinalis* is named *Khatmi* in TPM and is popular for topical use in dermatologic conditions with inflammation and/or scaling [5]. Vinegar is added to many TPM's dermatologic formulations to increase the penetration of ingredients. Vinegar is known to have polisher (*jaali*), escorting (*mobadreg*), penetrating (*nafez*) and siccative (*mojaffef*) effects in TPM [5]. According to the mentioned properties, vinegar is considered as an agent which can increase the efficacy of topical formulations in TPM [4]. Beside, vinegar is a liquid containing 5% acetic acid (CH₃COOH) and water which denatures the proteins and fats of the cell membrane of the bacteria and fungi, causing the release of protons, which leads to cell death. Therefore, this property of vinegar has made it a disinfectant agent. Also, a recent study demonstrated that using vinegar concomitant with other medicines can increase the efficacy of these medicines and decreases their consumption dose, due to its rapid absorption [10].

The most important limitation of this study

was the use of a non-standardized hand-made formulation. We also were not able to obtain the patient's permission to take photos of her scalp and hair due to her religious limitations. The response is not also clear to be achieved completely by topical use of *A. officinalis*, as the patient has received TPM lifestyle modifications concurrently.

Conclusion

This remarkable clinical experience suggests that further research should be conducted on the effect of *A. officinalis* and TPM's recommendations in the treatment of SD.

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Conflict of Interests

The authors declare no conflict of interests.

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