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**Successful Treatment of Chronic Scalp Seborrheic Dermatitis Using Traditional Persian Medicine: A Case Report**

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Running title: Treatment of Seborrheic Dermatitis with TPM

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

**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. 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 *Althaea officinalis* L.in combination with vinegar, plus the Traditional Persian Medicine's healthy life style advice and dietary recommendations.

Conclusion: This remarkable clinical experience suggests conducting further research on the effect of *Althaea officinalis* L. and TPM's recommendations in the treatment of SD.

**Key words:** seborrheic dermatitis, traditional medicine, *Althaea*

**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. Incidence of SD is up to 42% [1]. The most common age periods of SD are 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 pivotalrole of Malassezia. So far, no satisfactory curative treatment exists for SD [1].

This disease is called *“hozaz”* in Traditional Persian Medicine (TPM) [2]. According to TPM, appearance of small size scale and scurf liked bran *(saboos)*, on the skin and hair of the head are the most significant sign of this disease [2]. It is stated that these scales are not associated with any sore [2]. Several etiologies are described for this disease in TPM including *Safray-e-mohtareghe* (burned bile humor), *Ghalabe dam* (blood humor increase), *balgham-e-maleh* (*salty phlegm humor*), and *Dam-e-Sodavi* (blood mixed with soda humor) [2]. Avicenna (980-1037 AD), had suggested that *hozaz* was the result of *fesad-e-mezaj* (distemperament) in external layer of head and or whole the body due to *Balgham Booraghi* (*salty phlegm*) or *Dam-e-Sodavi* (blood mixed with soda humor) [3]. Several remedies are recommended for the treatment of *hozaz* in TPM. *Althaea officinalis* L. (AO) (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 big physician) [4], in the treatment of skin and hair diseases including *hozaz*. According to this book, topical application of AO together with vinegar, is useful for treatment and elimination of toxins from skin [4].

In this paper, we present a female patient with chronic SD, resistance to usual treatments, who was treated successfully with the above mentioned approach:

**Case presentation:**

A 32-year-old otherwise healthy woman suffering from severe SD in her scalp for the past 12 years was referred to Traditional Persian Medicine Clinic, Shiraz University of Medical Sciences, Shiraz, Iran . She was treated by several dermatologists and internal disease specialists, with the diagnosis of seborrheic dermatitis and used several topical corticosteroids and antifungals, with only partial and temporary effects. Post medical history has 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 has unremarkable.

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

We recommended the patient She was also recommended to respect healthy life style based on TPM, including suggestions to the avoid fast foods, industrial drinks, canned foods, frizzed foods, and chilli or salty foods. plus attention to having restful sleep and avoidance of constipation[3].

In the one-month follow-up, the patient mentioned that the scurf were removed from her scalp like a thick cradle cap after topically applying AO 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 was noted on physical examination of the scalp.

**Discussion:**

SD is a relapsing and chronic form of dermatitis [5]. Severity of this disease varies from mild and limited to the scalp to diffuse involvement of the seborrheic areas of body[6]. Dandruff is limited to the scalp, but SD can involve the scalp as well as other seborrheic area with different signs and symptoms, including pruritus, mild to moderate inflammation and flaking of the skin [7]. *Hozaz* is the name is given to SD which is described in Canon of Medicinewritten by Avicenna[3].

According to TPM, *hozaz* occurs in choleric temperaments (mejaz-e-safravi) consuming of hot nature foods and drugs, based on TPM knowledge, are associated with it [3].

Several studies have evaluated the pharmacologic effects of AO. Rezaei *et al*., have demonstrated wound healing and antibacterial effects of AO in a rat mode [8]. Another study has confirmed its antibacterial effect [9]. Antioxidant effect of its root is also demonstrated. Anti-inflammatory effect of AOwas demonstrated in an in-vivo study on Guinea pigs [10]. Antifungal effects of AO were reported recently by Korbekandi *et al* [10]. These anti-inflammatory and antifungal effects justify its use for treatment of SD. There is no report on its side-effects or drug interaction.

Vinegar is added to many TPM's dermatologic formulations to increase the penetration of ingredients. Vinegar is known to have polisher (*jaali*), escorting (*mobadregh*), penetrating (nafez) and siccative (mojaffef) effects in TPM [4]. All these properties can increase the efficacy of AOin TPM.

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.

**Conclusion:**

This remarkable clinical experience suggests conducting further research on the effect of *Althaea officinalis* L. and TPM's recommendations in the treatment of SD.

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**Conflict of interests:**

Nothing to declare.

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