

# A Case Study of Stress-Induced Alopecia Areata Treated with Hominis Placenta Pharmacopuncture

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The purpose of this study is to report the clinical application of Hominis Placenta Pharmacopuncture for Alopecia areata. Patient was diagnosed as stress-induced Alopecia areata 1 years ago. To reduce symptom, we treated a patient 8 times using Hominis Placenta Pharmacopuncture. Hominis Placenta was injected subcutaneously into the lesion of head scalp alopecia. According to photographs, the lesion had been replaced with new terminal hair and the size of the lesion had decreased. This case has shown that stress-induced Alopecia areata patient could be treated by Hominis Placenta Pharmacopuncture.

**Keywords:** alopecia areata, hominis placenta pharmacopuncture, case report

## INTRODUCTION

Alopecia areata (AA) involves one or more circular or ovoid hair loss plaques on the scalp [1]. Various factors can cause AA, though the autoimmune response is the most commonly recognized. As the hair follicle's immune system changes, immune cells attack the hair follicle, causing inflammation and hair loss [2]. AA also leads to mental stress [3]. In a study by Na and Suh

[4], compared to the control group, the patient group was more exposed to daily stress before AA was diagnosed, and it was confirmed that AA was caused by mental stress.

Western medical treatments for AA include topical and systemic steroids, minoxidil application, diphenylcyclopropenone (DPCP), ultraviolet therapy, topical or oral cyclosporin, and Janus kinase inhibitors [5, 6]. As for Korean medicine treatments, acupuncture, pharmacopuncture, herbal medicine, and micro-

dryon acupuncture are used. Regarding pharmacopuncture, AA treatments using Carthami flos, Hwangryunhaedoktang, bee venom, Juglandis Semen, a combination of Calculus bovis, Fel ursi, and Moschus (BUM), and Cervi Pantotrichum Cornu pharmacopuncture have been reported [7]. We performed a Hominis Placenta Pharmacopuncture (HPP) treatment that invigorates qi and enriches the blood on a patient diagnosed with stress-induced AA, obtaining significant results.

## CASE REPORT

### 1. Study subject

This study included one patient who visited the Ba-reun-mom S Korean Medicine Clinic due to circular temporal region hair loss. He was prescribed HPP because he was diagnosed with stress-induced AA with increased Eum deficiency.

### 2. Methods

#### 1) Study methods

This is a retrospective case report of one patient who visited the Ba-reun-mom S Korean Medicine Clinic from May 26, 2023, to July 15, 2023.

#### 2) Study approval

Retrospective analysis of patient data was approved by the Institutional Bioethics Committee (IRB) of Woosuk University Oriental Hospital (WSOH IRB H2308-01).

#### 3) Evaluation methods

##### (1) Visual evaluation and photography

The size of the hair loss area was measured by the naked eye. The condition of the affected area was compared by taking a picture.

## MAIN SUBJECT

### 1. Patient information

#### 1) Patient

OO Kim (M/21).

#### 2) Main symptoms

Stress-related AA in the temporal area.

#### 3) Symptom onset

Approximately June 2022.

#### 4) Associated events

He usually complained of ganjoyeoljeung (肝燥熱證) in Taeum-in, and due to constant stress, qi-stagnation (氣滯) persisted, and yin-deficiency (陰虛) intensified, resulting in hair loss.

#### 5) Treatment period

May 26, 2023 to July 15, 2023. A total of eight treatments were performed.

#### 6) Medical history

None.

#### 7) Family medical history

None.

#### 8) Present illness

A 21-year-old male patient with a sensitive personality and sturdy physique visited our hospital for Korean medicine treatment as his symptoms were not relieved one year after the onset of AA.

### 2. Treatment methods

#### 1) Pharmacopuncture

HPP: 1 cc per dose for the first three treatments, then 2 cc per dose thereafter. HPP was administered to the relevant area of scalp hair loss.

### 3. Treatment procedures

A total of eight outpatient visits from May 26, 2023, to July 15, 2023 (Fig. 1).

#### 1) May 26, 2023

At admission, an approximately 3.8 cm area of AA was observed in the left temporal region. When analyzed by microscope, it was observed that hair follicles had barely formed properly (Fig. 2).

#### 2) June 2, 2023

After one treatment, new hairs grew in some hair follicles.

The patient reported that oil-type secretions came out of the area, which felt mild itchy.

3) June 5, 2023

Several new hairs and downy hairs were observed in the hair

follicles.

4) June 9, 2023

Strands of normal hair began to appear. New hair became thicker and stronger than before.

5) June 17, 2023

More hairs have grown since the last treatment, and two or more hairs have been observed to grow from one hair follicle (Fig. 2).

6) July 1, 2023

The proportion of downy hairs decreased while black hairs increased significantly.

7) July 10, 2023

More hair follicles were formed, and the area had improved to the extent that it was no longer necessary to observe with a microscope (Fig. 2). The number of hairs increased to the point that a clear difference was noticeable when observed by the naked eye.

8) July 15, 2023

It was difficult to locate downy hairs; overall, hair has become thick, like ordinary hair. Additionally, the size of the area was reduced compared to the first treatment date.

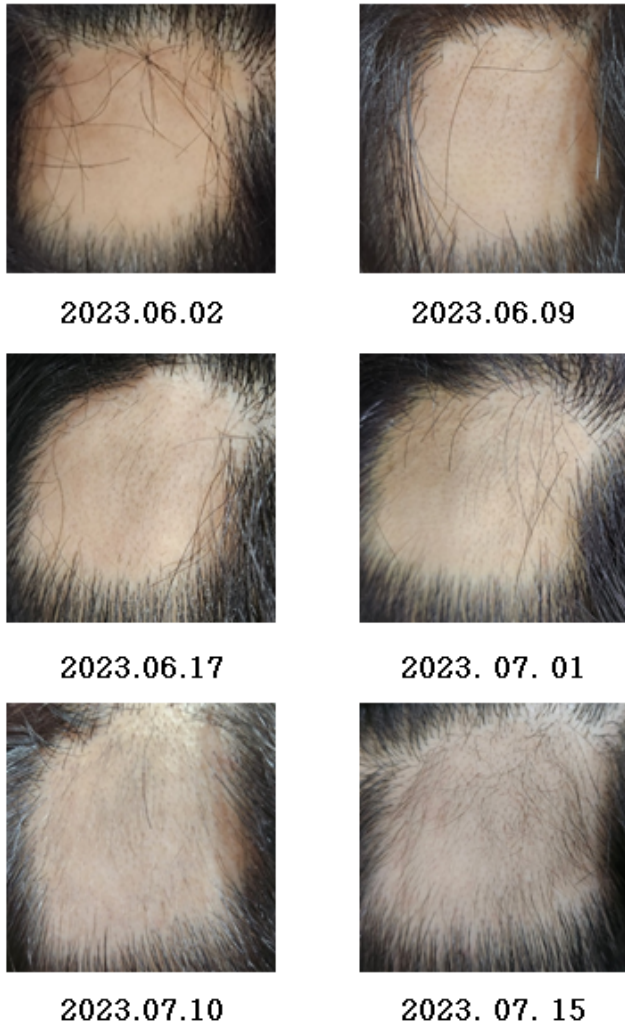


Figure 1. Change of hair growth during treatment.

**DISCUSSION**

Alopecia areata (AA) causes hair loss plaques of various sizes with clear boundaries. The causes of AA may include the patient's genetic predisposition, endocrine disorders, emotional stress, and environmental factors [8]. In Korean medicine, AA is called "Yupung (油風)." The leading causes of Yupung include

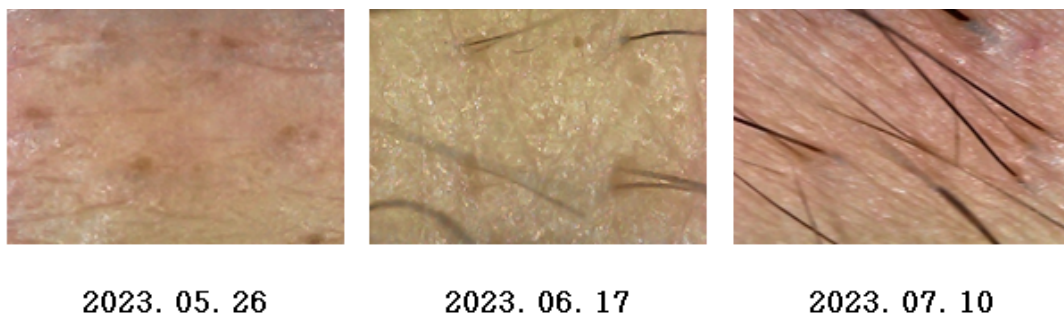


Figure 2. The patient's scalp photographed using a microscope.

blood deficiency and wind (血虛風盛), qi stagnation, and blood stasis by emotional stress [9]. As for Korean medical treatments, acupuncture, herbal medicine, and pharmacopuncture are used. In a clinical AA case study, Choi et al. [10] reported the effectiveness of Gagamhwajung-hwan for AA with heat. In a case report using pharmacopuncture, Kim et al. [11] reported the effectiveness of treating AA using bee venom and *Carthami flos* pharmacopuncture.

Hominis Placenta (紫河車) is dried human placenta that replenishes qi, blood, and jing. Thus, it treats qi and blood deficiencies and sterility caused by jing deficiency [12]. Additionally, Hominis Placenta has an anti-stress effect through antioxidant activity and is anti-inflammatory. Finally, it promotes cell proliferation [13]. In Korean medicine, qi deficiency or stagnation occurs if emotional stress persists. Since blood circulation occurs due to qi's activating force, qi deficiency or stagnation causes turbulent blood flow [14]. The relationship between blood and hair is defined as "hair is the rest of the blood (髮者血之餘)," and lack of blood and qi causes the hair to weaken and fall out [15].

The patient in the present case first discovered his area of AA in June 2022 but did not initially seek treatment. However, his AA worsened, so he visited the Ba-reun-mom S Korean Medicine Clinic on May 26, 2023. At his first visit, circular hair loss was observed in the left temporal region with a diameter of about 3.8 cm. The patient was diagnosed with ganjoyeoljeung (肝燥熱證) of Taeum-in. It was determined that AA occurred because of qi stagnation caused by constant stress, which worsened his yin deficiency, resulting in hair loss.

A total of eight treatments were performed using only HPP. At the first visit, hair follicles were not properly formed in the hair loss area. However, on the second visit, a week after treatment, new hairs had grown in some hair follicles. As the treatment was repeated, several new hairs grew, and by the eighth visit, there was noticeably more hair. The newly grown hair had gradually become thicker. The hair loss area appeared to gradually decrease, and there were no other symptoms or abnormal reactions to pharmacopuncture during the treatment period.

The number of people suffering from hair loss is increasing in modern society. The number of AA patients in Korea increased from 2017 to 2019, decreased in 2020, but increasing again in 2021 [16]. This is believed to be related to the stress of modern life. Experts agree that psychological factors are critical in the onset and worsening of alopecia [17]. Additionally, a study by Liu et al. [18] revealed that the health-related quality

of life (HRQoL) in the AA patient group was lower than in the control group, indicating that AA significantly impacted the patient's quality of life.

Unfortunately, it is currently impossible to prevent the onset and recurrence of AA. Treatments used in Western medicine, such as steroid treatment and minoxidil application, only temporarily improve symptoms, and there are currently no radical treatments [19]. In some cases, AA resolves spontaneously, but this takes about three months, and it is difficult to guarantee complete remission. Therefore, the results of this study, which confirmed that AA was significantly improved after eight treatments using only HPP, offer a more effective treatment option than existing AA treatments. Additionally, it is considered an efficient treatment in that it quickly shows positive curative effects with a relatively simple treatment method and low treatment cost.

This study is the first case of treatment using only HPP for stress-related AA, and the results indicated that the treatment was effective. However, this study was limited in that it is based on only one case and did not have a control group. Therefore, additional studies are necessary to prove the efficacy of Hominis Placenta Pharmacopuncture for treating AA.

## CONCLUSION

From May 26, 2023, to July 15, 2023, HPP treatment was performed on a patient diagnosed with AA due to worsening yin deficiency (陰虛) because of stress. The patient received eight treatments, and the size of the hair loss area reduced while the hair thickened as therapy progressed. HPP treatment alone, rather than in combination treatment, was administered to a patient with stress-related AA, which significantly reduced the patient's discomfort. Finally, the authors recommend that a controlled study on pharmacopuncture HPP therapy for AA is needed to further study this promising new treatment.

## CONFLICTS OF INTEREST

The authors declare no conflicts of interest in this work.

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