

Clinical Experience of Professor Ma Shuanquan in Treating Androgenetic Alopecia

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Abstract: Professor Ma Shuanquan believes that the root cause of alopecia lies in the liver, spleen, and kidneys. Insufficient innate endowment, excessive contemplation, or liver and spleen damage, resulting in insufficient liver blood, spleen dysfunction, and Syndrome of deficiency of kidney essence, leads to blood stasis in the hair follicles, blocking the flow of qi and blood, and causing hair follicles to lose nourishment, resulting in androgenetic alopecia. In treatment, Professor Ma divides it into two types based on the differentiation of liver and kidney deficiency and spleen and kidney deficiency. The treatment methods include nourishing the liver and kidneys, tonifying the spleen and kidneys, blood circulation removing blood stasis, and qi-regulating and calming the mind Chinese medicines to achieve individualized treatment, with significant therapeutic effects.

Keywords: Androgenetic alopecia, Liver and kidney deficiency, Spleen and kidney deficiency, Clinical experience.

1. Introduction

Professor Ma Shuanquan is a senior traditional Chinese medicine (TCM) expert in Shaanxi Province, serving as a guiding teacher for academic inheritance in TCM. He is recognized as a renowned TCM practitioner in Shaanxi Province and one of the "Top Ten Famous TCM Doctors" at Shaanxi University of Chinese Medicine. He is also a leading figure in the discipline of dermatology within the "Twelfth Five-Year Plan" of the State Administration of Traditional Chinese Medicine. With over 40 years of clinical experience, Professor Ma has accumulated rich experience in treating androgenetic alopecia (AGA). Androgenetic alopecia (AGA) is a common type of hair loss in clinical practice^[1], which is a chronic hair disease with progressive miniaturization of hair follicles, which is mainly manifested by progressive and persistent thinning of hair diameter, reduction of hair density and hair loss, and even scalp exposure, usually accompanied by symptoms such as greasy hair, increased scales, and itching [2], usually accompanied by changes in the normal hair growth cycle (i.e., shortening of anagen phase and prolongation of catagen and telogen phases). Its pathogenesis is not fully understood but involves multiple factors such as androgen metabolism, perifollicular inflammation, genetics, psychological, and lifestyle factors. AGA worsens with age, with the incidence significantly higher in the elderly, affecting at least 80% of men and 50% of women by the age of 70^[1]. Due to various factors such as societal pressures and lifestyle changes, Hair loss is also a problem that is plaguing more and more young individuals. Although AGA does not pose a threat to life, it can significantly impact the psychological and social lives of patients. Modern clinical approaches focus on regulating endocrine-immune-neurological dysfunctions, including the use of drugs such as finasteride, topical minoxidil, as well as techniques like microneedling and laser therapy^[3]. However, due to inevitable side effects and difficulties in achieving a cure, patient compliance is poor, making long-term adherence challenging. While hair transplant surgery yields immediate results, it is not suitable for all patients and is costly. Therefore, there is a need to explore new, more effective, economical, and convenient treatment modalities.

In traditional Chinese medicine, hair loss was first mentioned in the "Huang Di Nei Jing" as "falling hair" or "hair loss". Chen Shigong first proposed the disease name "oil wind" in "Surgery Genuine", similar to modern medicine's alopecia areata; while Wang Hongxu first described "greasy hair ringworm" in "Comprehensive Collection of Symptoms and Treatments in Surgery", resembling modern medicine's seborrheic alopecia^[4]. TCM has a long history of treating hair loss, with a wealth of effective experiences recorded. For example, "Compendium of Materia Medica" documents many beneficial herbs for treating hair loss, such as *Rehmannia glutinosa*, *Atractylodes macrocephala*, and *Polygonum multiflorum*, which have shown significant efficacy in clinical practice. Additionally, TCM emphasizes individualized treatment based on syndrome differentiation, tailoring treatment plans according to patients' specific conditions and constitutional characteristics to achieve a cure. Therefore, TCM treatment is a safe and effective option for patients with hair loss. Professor Ma Shuanquan focuses on identifying liver, spleen, and kidney deficiencies when treating androgenetic alopecia, adept at using methods to nourish the liver and kidneys, tonify the spleen, supplemented with promoting blood circulation, removing blood stasis, regulating qi, and calming the mind to achieve comprehensive effects. The clinical application of his approach has shown significant efficacy, as detailed below.

2. Etiology and Pathogenesis

2.1 Liver, Spleen, and Kidney Deficiencies are the Root Cause of AGA

2.1.1 Deficiency of kidney essence is the fundamental cause of AGA^{[5]-[7]}.

Hair is an important component of the body, Its color and prosperity reflect the rise and fall of qi and blood in the internal organs. "The Medical Classic of the Yellow Emperor" states: "Hair is the external sign of kidney essence; when essence and blood are sufficient, hair is dense and lustrous." TCM believes that "the kidneys store essence, and its brilliance is reflected in the hair," indicating that the

abundance and normal transport of kidney essence are crucial for maintaining healthy hair. Additionally, "The Medical Classic of the Yellow Emperor-Plain Questions" mentions: "When women reach the age of 35, their Yangming meridian declines, their faces become scorched, and their hair begins to fall out; when men reach the age of 40, their kidney qi declines, and their hair falls out, and their teeth become weak." Therefore, if one is born with insufficient kidney qi or if postnatal habits deplete kidney essence, it can lead to kidney essence deficiency, resulting in hair loss.

2.1.2 Deficiency of liver blood and spleen qi are important factors in the development of AGA.

"Synopsis of Golden Chamber - Volume Seven" states: "It is the liver that governs the blood of the Chong and Ren meridians... Men develop beards on their lips, and women menstruate regularly." This indicates that when the liver's qi and blood are sufficient, hair flourishes. TCM believes that "the liver governs blood, and hair is the surplus of blood." Individuals with large emotional fluctuations and prolonged worries may deplete yin blood, leading to insufficient qi and blood, weakened propulsion, abnormal circulation of qi and blood, and inability to nourish the hair, causing it to deteriorate^{[5][6]}. In summary, "Zhang's Medical Guide - Various Blood Gates" states: "If qi is not consumed, it returns to the kidneys and becomes essence; if essence is not depleted, it returns to the liver and transforms into clear blood." The liver stores blood, and the kidneys store essence, known as "the same source of liver and kidney," also known as "the same source of essence and blood." The adequacy of liver and kidney essence and blood directly affects the quantity and color of hair. If liver and kidney essence and blood are deficient, qi, blood, and body fluids are obstructed, leading to hair loss. Therefore, treatment should focus on nourishing the liver and kidneys, regulating qi and blood to restore the health of the hair.

Zhang Ziping believes that the growth of hair is closely related to the spleen, kidneys, qi, and blood^[6]. The spleen and stomach are the foundation of acquired constitution. "On the Spleen and Stomach" states: "All diseases originate from the weakening of the spleen and stomach," indicating that abnormal congenital spleen and stomach function are the cause of many diseases, including hair loss. One of the main reasons for hair loss in modern people is due to the influence of spleen and stomach function^[8]. Prolonged unhealthy dietary habits and dietary preferences can severely damage the function of the spleen and stomach, leading to weakness of the spleen and stomach, affecting the most important digestive function of the spleen and stomach, causing phlegm-dampness to stagnate internally, obstructing the meridians, long-term stagnation transforming into heat, internal damp-heat rising to the top, blocking the hair follicles, and eventually causing hair loss. Alternatively, The patient suffers from spleen damage due to excessive worrying, leading to depletion of Yin and darkening of Qi. This weakens the Qi and blood, resulting in malnourished skin, dry hair roots, and hair loss in patches. The treatment should focus on tonifying the heart and spleen to nourish the blood and promote hair growth.

"Su Wen: The Generation of the Five Organs" says: "The

combination of the kidneys is the bones; Its glory, hair also; Its master, the spleen also. That's why If you eat too much sweetness, your bones will ache and fall." Sweetness is unique to the spleen, and eating too much hurts the spleen, which shows that spleen deficiency is closely related to hair loss. Patients with seborrheic alopecia are characterized by oily head and face, moist hair or even like ointment, sticky and unpleasant hair, sometimes wet scale accumulation, often need to be washed several times a day, and its characteristics are consistent with the damp evil sticky and turbid, lingering and difficult to get rid of the disease. "Treatise on Typhoid Fever" says: "Those who are wet have the natural qi of the spleen, and if the soil is wet, it is anointed soil, and the spleen is damp, which is raw anointing oil." "The homologous wet-lipid is caused by abnormal metabolism of spleen deficiency and water, and loss of turbidity and elevation. If the spleen is healthy, the rise and fall of turbidity are orderly, the dampness can be dissolved, and the turbidity is difficult to grow, and the hair will not accumulate and lose hair. From this point of view, spleen deficiency and dampness are the core pathogenesis of seborrheic alopecia.

2.2 Promote Blood Circulation, Dispel Stasis, Regulate Qi, and Calm the Mind to Treat Symptoms.

Regarding the main symptoms of seborrheic alopecia, such as hair loss, greasiness, and itching, they are all related to blood stasis. Blood stasis blocks the channels, leading to the lack of nourishment for hair follicles, impeding the excretion of metabolic waste, and thus causing toxins to accumulate, leading to hair loss. At the same time, blood stasis inhibits the flow of qi, affecting the normal transformation of fluids and blood, causing excess fluids to leak out of the blood vessels, resulting in skin greasiness. Blood stasis blocks the channels of the scalp, causing imbalances in local qi and blood circulation, blocking the hair follicles, and leading to "blood stasis causing wind" and "wind causing itching." The itching is caused by the wind's tendency to move and not stay in one place, its lightness and tendency to open and release, and its habit of taking advantage of any opening to enter, causing hair to fall out when it enters the pores and hair follicles. If it enters the crown of the head, it causes itching and flaking. Qing Dynasty physician Wang Qingren proposed that "blood stasis exists beneath the skin and on the surface, blocking blood vessels and preventing new blood from nourishing the hair, so the hair falls out," meaning that blood stasis is an important cause of hair loss. This explains that the growth and shedding, dryness and moisture of hair depend on the nourishment provided by blood. If there is not enough blood, the hair will lose its nourishment and fall out. In the field of medical academia, the following sentence can be translated as: "According to the theory that 'blood is the mother of qi, and qi is the commander of blood,'^[9] Dr. Ma emphasizes the importance of regulating qi and blood in his clinical treatment of androgenetic alopecia. The principle of activating blood circulation through qi regulation runs throughout the treatment."

The liver is angry, and the anger hurts the liver. Emotional depression and anger, liver excretion dysfunction, liver qi stagnation, qi depression leads to poor blood flow; Liver depression makes it difficult for sufficient blood to reach the peak to nourish the hair and hair roots, resulting in hair loss

[10]. Anxiety and depression can cause insomnia, irritability, irritability and other symptoms that deplete qi, blood and fluid, and aggravate liver depression or kidney yin deficiency.

3. Syndrome Differentiation

Professor Ma believes that the pathogenesis of androgenetic detachment is complex, or the liver and kidney are deficient, the qi and blood are not sourced, and the kidney essence is depleted, and there is no way to nourish the hair roots; or poor diet, which hurts the spleen, and the biochemistry of qi and blood is sourceless, and the blood withers and falls. Therefore, the clinical syndrome differentiation is mainly divided into two syndromes: liver and kidney deficiency and spleen and kidney deficiency, in order to nourish the liver and kidney, strengthen the spleen and dampness, nourish blood and grow hair, promote blood circulation and eliminate blood stasis.

1) Liver and kidney insufficiency Symptoms include long-term hair loss, sparse and soft hair, brittle and dull hair, heavy on the top of the head and forehead, dull complexion, thirst for drink and not wanting to swallow, ordinary mood irritability, irritability, bitter mouth and flank pain, insomnia and dreams, men's spermatozoa, women's menstrual disorders, menstrual abdominal pain, pale red tongue, less lichen, accompanied by thin pulse or thin weakness. Treatment to nourish the liver and kidneys, invigorate blood and dispel stasis, see the specific recipes: Rehmannia rehmannia, Angelica, Chuanxiong, Lotus mossa, Qianghuo, safflower, Astragalus, Polygonum multiflori, Rehmannia rehmannia, Salvia, wine privet, fried white peony, licorice, Poria cocos, bran fried atractylodes, vinegar tulip, scalded bones, calamus, wolfberry, mulberry, peilan. Fangzhong rehman, wolfberry, mulberry, nourishing the kidney and nourishing the liver, black lotus, ligustrum filling lean kidney, Poria cocos, Peilan spleen and middle, angelica, Chuanxiong, white peony nourishing blood and regulating menstruation, Yujin soothing the liver and regulating qi. When all kinds of medicines are combined, the liver qi is sparse, the kidney is replenished and the essence is filled, and the qi and blood are nourished and born. Those who rest at night add Yuanzhi, Acacia Skin, and Shouwu Teng to calm the nerves; Those who are irritable and irritable add Bupleurum and Yujin to soothe the liver and regulate qi; Those with thin pulse and blood deficiency add chicken blood vine to nourish blood and invigorate blood; Those with spleen deficiency and dampness add patchouli and sand kernels to dissolve dampness and strengthen the spleen; Those with yin deficiency and internal heat add danpi and red peony to cool blood and invigorate blood; Women with irregular menstruation can add motherwort, epimedium to invigorate blood and semen, regulate menstruation and relieve pain.

2) Spleen and kidney deficiency syndrome Symptoms include fine and soft hair, increased oil secretion on the head and face, new hair is difficult to grow, hair is difficult to continue, scalp flushing and itching, hair is sticky and unpleasant, sometimes wet scale accumulation, fatigue, poor appetite, loose stool, sticky and unpleasant, etc., pale tongue, white and greasy, smooth or slow pulse. The treatment is to strengthen the spleen and dispel dampness, benefit the kidneys and dispel stasis. See: Yam, Angelica, Codonopsis, Fried Atractylodes with Bran, Chicken Blood Vine, Poria Cocos, Wolfberry,

Mulberry, Cuscuta Seed, Yamagi Meat, Licorice, Polygonum Multiflorum. Atractylodes, yam, Poria cocos strengthen the spleen and dampness, take care of the spleen and stomach, Codonopsis ginseng strengthens the spleen and nourishes blood, angelica, chicken blood vine nourishes blood and invigorates blood, wolfberry, mulberry, dodder seed, mountain firewood meat, Polygonum multiflorum nourishes liver and kidney, nourishes sperm and blood, and licorice reconciles various medicines. Add ligustrum seeds, dodder seeds, etc. at the right time to take into account the nourishment of the liver and kidneys. Those who are deficient in yin and fire are added to the birth, and the cooked land is nourished by yin and fire.

4. Internal and External Governance

Professor Ma emphasizes both internal and external treatment and comprehensive treatment in the treatment. Internal treatment through the liver and kidney, spleen and dampness, blood growth, blood circulation and stasis, and to regulate the internal organs qi and blood, external treatment often uses traditional Chinese medicine external washing, rubbing, moxibustion, plum blossom needle percussion, traditional Chinese medicine external washing, rubbing can directly act on the affected area, increase the local drug absorption concentration, so that the effect of the drug directly to the disease, moxibustion and plum blossom needle act on the affected area, improve the flow of qi and blood in the skin lesions. It is used both internally and externally, complementing each other and enhancing the curative effect. For patients with seborrheic alopecia with strong hair and facial oil secretion, they were given a self-simulated dry and damp hair growth external wash, consisting of 30g of Atractylodes atractylodes, Phellodendron chinensis, Sophora sophora, Cnidium monnieri, Dihuzi seed, Saponaria sinensis, Arbovitae orientalis, Angelica sinensis, and red peony. For blood deficiency and dry hair loss, the blood nourishing hair growth formula was given, which was composed of 30g of Astragalus membranaceus, 20g of Angelica, 20g of Shengdi, 15g of safflower, 30g of red peony, 30g of chicken blood vine, 30g of white peony, 20g of Saponaria sinensis, 30g of Polygonum multiflori, 15g of licorice, 15g of parsnip, and 30g of Polygonatum polygonatum For patients with alopecia areata or large area, alopecia areata was given an external wash, consisting of 20g of angelica, 30g of Polygonum multiflori, 15g of safflower, 20g of saponaria, 30g of cinnamon branches, 15g of ginger, 15g of mugwort leaves, and 15g of parsnip. For patients with small area and number of alopecia areata, hair growth tincture is rubbed, composed of psoralen, cinnamon branch, safflower, dried ginger, soaked in 75% alcohol for 10 days and then used externally. If there is no obvious hair growth for more than 3 months after treatment, plum blossom needle puncture or ginger moxibustion can be added to the affected area, once a week.

5. Daily Maintenance

Professor Ma believes that hair loss is a relatively difficult disease to treat in dermatology, and there are many causes of it, including diet, emotion, work and rest, labor, and physical fitness. Patients are often advised to eat a healthy diet, eat more fruits and vegetables and foods rich in vitamin C, exercise appropriately, and ensure adequate rest time. At the

same time, the patient should be instructed to wash their hair 2-3 times a week, and should not wash excessively, so as not to damage the health of the scalp. Advise patients to build confidence and adhere to treatment in order to achieve recovery. If you have thinning and dry hair, pay attention to hair care and hair care. Patients with scalp chisel perifolliculitis and infectious cysts should be treated aggressively as soon as possible to prevent the formation of cicatricial alopecia and permanent alopecia areata.

6. Typical Medical Cases

The patient, a 22-year-old male, was first seen on January 3, 2024. Chief complaint: increased hair loss for more than half a year. He complains of often staying up late, working under pressure, thinning hair, and softening of hair. Current symptoms: sparse and soft hair, brittle and dull hair, a little dry scales, receding hairline, fatigue, pale red tongue, pale moss, and heavy pulse. Traditional Chinese medicine diagnosis: oil wind. TCM syndrome differentiation: liver and kidney insufficiency. Treatment: nourish the liver and kidneys, nourish the blood, invigorate the blood and dispel wind. Prescription: Rehmannia 12g, Angelica Sinensis 12g, Chuanxiong 10g, Lotus 10g, Qianghuo 8g, Safflower 10g, Astragalus 15g, Polygonum Multiflorum 9g, Rehmannia 12g, Salvia 12g, Wine Ligustrum 10g, Fried White Peony 10g, Licorice 9g, Hot Bone Crushing 10g, Cuscuta Salt 12g, Poria Cocos 15g, Fried Atractylodes Bran 12g, Cinnamon 6g, Vinegar Tulip 12g, Acorus 10g, Lycium Berry 12g, Mulberry 12g, Peilan 10g. 7 Chinese medicines, one dose per day, 300ml decoction in water in the morning and evening. In addition, with an appropriate amount of our hospital preparation, apply the hair growth tincture to the affected area. Second visit on January 10, 2024: A small number of newborn vellus hairs were seen in the patient's alopecia. The tongue is dark, mossy and white, and 10g of hot bone crushed is added in front. The decoction was the same as before, followed by 7 doses, still combined with external hair growth tincture. Third diagnosis on January 25, 2024: self-reported hair loss is less than before, the tongue is reddish, the moss is pale and slightly greasy, and the pulse is stringy. In front, 13g of Bupleurum chinensis is added to soothe the liver and regulate qi, 12g of patchouli to strengthen the spleen and dampness, 10g of danpi and 8g of red peony to cool and invigorate blood. The decoction was the same as before, followed by 7 doses, still combined with external hair growth tincture. Fourth consultation on February 6, 2024: hair loss is reduced compared with before, and there is no other discomfort. Continue to pay 7 in front of you, with a tincture for external hair growth. The patient had a good clinical treatment effect, and the patient was followed up two months later, and the patient's self-reported hair loss symptoms were significantly alleviated, and there were no symptoms of increased hair loss symptoms after stopping treatment.

According to the language: hair loss is closely related to the liver, spleen and kidneys, especially the kidneys. The patient has a long course of prolapse and is in the period of youthful energy, but the mouth and tongue are dry, fatigue, and the face is dark. Most of the patients are congenital kidney qi endowment insufficiency, liver and kidney deficiency yin deficiency, and the patient's tongue is dark purple, which is a congestion syndrome. After years of clinical practice, Mr. Ma

believes that adolescent hair loss is not blood fever, but related to blood stasis, and this kind of population is related to individual quality and genetic factors. Mr. Ma used this experience to nourish the liver, spleen and kidney, promote blood circulation and remove blood stasis to treat hair loss, and achieved good results.

In short, with the change of people's living habits, the increase of study and work pressure, the change of dietary structure and many other external factors, the etiology and pathogenesis of androgenetic alopecia have changed. "Treating diseases must be based on this", tonifying the liver and kidneys, and benefiting sperm and blood are the most important links. In clinical treatment, "liver and kidney insufficiency" is the basic syndrome, and some patients with concomitant syndrome or other syndromes can be treated with drugs added or subtracted. At the same time, the hair growth cycle is long, and the time required for treatment is often relatively long, so it is necessary to communicate well and give confidence during the patient's visit.

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