

Compare and contrast the treatment of psoriasis as reported in the medical research literature, with the TCM approach.

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Psoriasis is a common chronic, recurrent skin disorder which has been known to people for a few thousand years. It was considered to be a type of leprosy in ancient times and it is called “Yin Xie Bing” in China (Elsevier, 2005). It is a non-contagious skin disorder and commonly found on the scalp, ears, back, arms, elbows, legs and knees. If the disease affects on the toes and fingernails, they will become lustreless and ridges will develop (National Psoriasis Foundation, 2002).

There is Chinese Research on Matrine and Oxymatrine, which are the two key alkaloid components found in sophora roots. The Matrine and Oxymatrine are obtained primarily from *Kushen* (*Sophora japonica*), but also from *shandougen* (*Sophora subprostrata*), and from the above-ground portion of *Sophora alopecuroides*. The Matrines were isolated and classified in 1958. These herbs are unique tetracycloquinolizindine alkaloids. Investigation on the pharmacology has been intensive and clinical application of these alkaloids has also gone on for the past decade and remains one of the focal points of Chinese medical research. The main clinical applications are treatment of people who are suffering from skin diseases, such as Psoriasis and eczema (Dharmanada, 2005).

Soploras is often used in the treatment of skin diseases. A topical liniment was developed combining sophoras’ matrine with the anti-inflammatory flavonoid baicalin from huangqin for the treatment of psoriasis (Xiang, (2002). The treatment has been reported to be highly effective and the use of sophora for psoriasis has demonstrated promising effects (Zhang,1996). Shang Junling and his colleagues at the Department of Dermatology, Tianjin Changzhen Hospital, studied and made the research on the mechanism by which sophora alkaloids reduces psoriasis patches (Zhang Junling).

The characteristics of psoriasis is usually surrounded by dry erythema and scale like patches of different sizes. There are multi-layers of greyish white or silver white colour scales, which develop on the erythema. In traditional Chinese medicine (TCM), it is classified as “White Sore” (Bai Bi) or “Loose Skin Tinea” (Song Pi Xuan) (Zhu 1997 ; Hsu 2004). The aetiology of psoriasis is caused by the external pathogenic wind at first. This wind attacks in the skin and turns into heat later down the track, leading to heat in the blood and dryness of blood or blood stasis. The other possible causes could be due to Liver and Kidney Yin deficiency, disharmony between Chong and Ren channels, or Yin and yang in the Zhang Fu organs (Li & Zhao, 1991)

The causes of psoriasis vary depending on different factors. The factors that cause the disease of psoriasis include wind, dampness, heat, poison dryness, blood stasis and

deficiency of the kidney-qi and liver-qi. Psoriasis can affect and damage skin and can be caused by heat and manifests as red skin, pustule, scorching, erosion, itching and pain. The symptoms are generally accompanied severe itching (Yuan, 2004 ; Elsevier, 2005).

Psoriasis from a western medicine point of view is briefly described as a chronic skin disease that generally presents with silvery scales overlaying red, elevated patches of skin. The lesions may generally affect a small or large area of the body surface and typically appear on the elbows, knees, scalp, and on the back of the body. The cells in the upper part of the skin, the epidermis, reproduce at a very rapid rate. Psoriasis is also a hyperproliferative disease (All Natural Psoriasis Healing Center, 2005).

The disorder is neither infectious nor contagious and it is not considered as any other medical illness except for the possibility of psoriatic arthritis. Psoriasis can happen at any age and in both sexes. Certain drugs, such as beta blockers for heart disease (Inderal); internal cortisone medications and lithium can be used for treatment (All Natural Psoriasis Healing Center, 2005).

Psoriasis from the TCM point of view is due to spleen or digestive system deficiency which cannot supply enough nutrition to the lung and inhibits the normal function of the liver. Treatment principle (T/P) is to supply nutrition to the spleen and the liver (All Natural Psoriasis Healing Center, 2005).

Psoriasis is an inflammatory skin disorder and affects approximately 2% of Americans. One-third of the patients with psoriasis have a relative suffering from psoriasis, therefore it is not widely recognized as a genetic disease. However, research on families and identical twins who are suffering from psoriasis show there is a strong genetic component, although environmental factors, such as infections, stress, and injuries are also important (University of Michigan, 2005).

University of Michigan carried out a study in 1991 which aimed to identify the genetic bases of psoriasis. The laboratory has found that psoriasis is a "complex disease" which may involve genetic, immunological and environmental factors. Research from the university during the last ten years has revealed at least nine potential gene locations that may contribute to psoriasis (University of Michigan, 2005).

There are quite a number of varieties of psoriasis, such as,

Blood and wind heat – the cause of the psoriasis is due to excessive blood heat. Erythema and the spreading lesions depend on the predominance of heat in the blood. The disease is generated by the invasion of a wind pathogenic attack. The pathogenic attack can dry up the body's fluids and blood and result in an increase of internal heat and temperature, which causes eruption and white scales from excessive wind heat (Zhu,1997 ;Elsevier, 2005).

Fire-toxin – the symptom of lesions are red plaques with thick yellow or yellowish-brown scale. The disease is due to inflammatory disease of the upper respiratory tract, which manifests as tonsillitis and laryngitis (Elsevier,2005 ; Hsu, 2004)

Noxious-heat and blood-stasis – the lesions are generally dark red and covered by dark, thick hard scales, which are sometimes rough like an oysters shell. The sessions persist for several years. The tongue is dark purple and with yellow and greasy coating. The pulse is deep-slippery and forceful (Zhu, 1997 ; Elsevier, 2005).

There are a number of treatment principles for psoriasis and all the T/P are generally based on four major methods: dispersing wind, clearing heat, transforming dampness and nourishing blood (Zhu, 1995). T/P also needs to be applied to different symptoms of the psoriasis as follows (Marina's lecture notes, 2005) :

Psoriasis due to wind heat, T/P : expel wind, eliminate heat, stop itchiness.

Formula : Xiao Feng Sang

Psoriasis due to heat in the blood, T/P: clear heat, cool the blood, stop itchiness.

Formula : Xi Jiao Di huang tang (modified)-

Psoriasis is due to dryness in the blood, which manifests as a deficiency of yin and blood and transforms the muscles and skin and causes symptoms of wind dryness and then triggers psoriasis.(Elsevier, 2005). T/P: tonify blood, moisten dryness and eliminate wind.

Formula : si wu xiao feng san

Psoriasis due to damp heat, T/ P : clear heat, eliminate dampness, stop itchiness.

Formula : shan feng ku shen tang

Psoriasis due to imbalance between chong and ren ; T/P : tonify qi and blood, regulate chong and ren channel.

Formula : Modified si wu tang

Psoriasis due to channel blockage by wind dampness, T/P: expel wind, eliminate dampness, dissolve toxins, promote blood circulation and regulate channel.

Formula: modified du huo ji sheng tang

In the meantime, a combination of exterior herb paste can be used for better effects, such as :

Dry chronic paste: huang qi, tu fuling, bai lan gen, gan cao, zi cao, dang gui, gui zhi – each 10 g. For a severe case, feng fang and dai fu zi can also be added into the paste.

During the treatment period, it is suggested to avoid ingestion of orange, tomato, potatoes, coffee, alcohol, shell fish and red meat and to avoid emotional stress.

Acupuncture prescription (Elsevier 2005) :

Li -11 qu chi, tw-6, zhi gou, gb20, feng chi, li 4, he gu, sp10, xue hai and sp 6 san yin jiao.

The following essay also explores and analyses a case of a 35 year-old male patient, who was suffering from the symptom of erythema psoriasis. The disease occurred and developed in the knees and elbows. The symptoms will be discussed according to the Traditional Chinese Medicine diagnosis of patient's present symptoms and signs. Appropriate herbal prescriptions and treatment principles will also be analysed for treatment of this case of psoriasis.

The symptoms of the patient's psoriasis are "erythema, papule and pustules on his knees and elbows for over 15 years. The symptom is acute itchiness, accompanied by a burning sensation on the affected areas. Pustules ranging in size from needle tip to millet grains occurred in the affected areas. The skin will dry off when the pustules are ruptured. Pustules are a kind of skin lesion, which are prominent in the surrounding skin, containing pus (Li & Zhao, 1991). The psoriasis occurs due to heat brewing interior and turns to heat toxin.

Heat toxin affects the area of the skin and produces dampness manifesting as pus on the skin. The pustules come in a group, and occur repeatedly. The pus-containing pustules are slightly yellow inside and can dry off and develop scales. In Chinese Medicine, this is the manifestation of damp-heat toxin (Li & Wang, 1997).

This dampness also creates heaviness and shows in the patient's general symptoms as "bloated, uncomfortable stomach and loose stools two to three times a day. The tongue is white, greasy and sticky in the rear side and middle". The dampness is attacking and obstructing Patient's middle jiao, so stomach and his spleen are being impaired and transformation and transportation are also affected. Due to the spleen being impaired, the patient loses his appetite and assimilation function. The condition is marked by discomfort and pain in the stomach as well as diarrhoea and loose stool. If the stomach is also affected, this will manifest as reduced food intake, discomfort after eating and belching (Wiseman & Ellis, 1996, p 163). The tongue fur will be thick and slimy (Wiseman & Ellis, 1996).

There are dark purple papules showing on the patient's knees and elbows. The papular eruptions are also key symptoms due to blood heat and wind heat attack (Li & Zhao 1991). The yang heat pathogen usually attack people suddenly.

In clinical practice, psoriasis often manifests as reddened skin, pustules, itchiness and heat or burning sensation (Li & Zhao, 1991, p 9). The feeling of itchiness is caused by wind and heat. The pathogenic wind is often lodged in the blood level and has a tendency to create heat, becoming wind and heat. Then the excessive heat can dry up the blood and yin. As a result, blood deficiency will occur (Li & Zhao 1991). If wind is trapped in the body, it tends to injure blood and yin as well. Therefore wind and heat are both pre- cursors to blood and yin damage (Maciocia, 2000). The thin, fine pulse from the patient indicates Qi and Blood deficiency or Yin and Yang, in

particular, and points to Blood and Yin deficiency according to Chinese Medicine theory (Wiseman & Ellis, 1996, p120). In this case, wind and heat lodge in the body over a long period of time and thus cause Blood and Yin deficiency.

The patient had been suffering the psoriasis for years and easily felt stressed and nervous and could not concentrate in doing his job when he was feeling itchiness. Clear fluids leaked from the papules after scratching. He was also prone to headaches.

His left guan mai of the pulse was wiry, which manifests in the obstruction and stagnation of liver qi. The obstruction of liver is showed that the liver qi was being impaired and liver qi was not flowing freely. His mood was always depressed, he easily became angry and rigid (Lee 1998 ; Maciocia 2000). These symptoms also reflect metal disharmony and emotion and the patient became depressed and impatient. When Chong mai and Ren Mai are affected, he would become very irritable, low mood, hypochondrial pain and distension (Wiseman & Ellis 1996).

The manifestations of psoriasis reflect the fact that the patient is suffering from wind attack, damp-heat, yin and xue deficiency and liver qi is blocking and causing stagnation. According to the TCM point of view, the treatment principle is that there is a need to release liver qi and liver stagnation. In order to release the liver symptom, it also needs to reduce damp-heat by nourishing the yin and blood.

Formula: Niu Pi Xuan Er Hao Fang plus (Journal of Chinese Medicine)

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|------------------|---------------------|--------------------|
| Tu Fu Ling 30 g | Yin Chen Hao 15 g | Sheng Di Huang 15 |
| Jin Yin Hua 15 g | Lian Qiao 15 g | Sheng Shi Gao 15 g |
| Pu Gong Ying 10g | Zi Hua Di Ding 10 g | San Leng 10 g |
| Ye Ju Hua 10 g | Fang Feng 10 g | Bai xian pi 10 g |
| Dang gui 10 g | Gan Cao 6 | |

Acupuncture points (Journal of Chinese Medicine ; Elsevier 2005) :

Dazhui DU 14, Fengchi GB20, Feishu BL-13, Hegu L.I. 4 Quchi L.I. 11,

Xuehai SP- 10 , Sanyinjiao SP6, Zusanli ST36

Psoriasis is a chronic common skin disease and has been known for thousands of year. It is quite itchy and is usually accompanied by the symptom of dampness, heat, blood stasis and is also related to kidney and liver. Research results from western medicine and TCM are presented for comparison. As per Traditional Chinese Medicine, blood heat is considered as a major factor for psoriasis. Wind, damp, heat and blood stasis are also the key factors that cause psoriasis. Damp heat diets, such as alcohol, coffee, red meat and eggs should be avoided. Emotional stress should also be relieved and avoided. The case study is to review and explore the causes and treatments of psoriasis.

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