



Multiple sclerosis (MS) is an unpredictable disease of the nervous system in which communication between the brain and other parts of the body is disrupted. Its effects can range from relatively mild to devastating. The symptoms may mysteriously occur and then disappear. In the worst cases, a person with MS may be unable to write, speak, or walk.

During an MS attack, inflammation occurs in areas of the white matter (pale-coloured nerve tissue) of the central nervous system in random patches called plaques. This is followed by destruction of myelin, the fatty covering that protects nerve cell fibers in the brain and spinal cord. Myelin allows for the smooth, high-speed transmission of electrochemical messages between the brain, the spinal cord and the rest of the body. When myelin is damaged, neurological transmission of messages may be slowed or blocked completely, resulting in diminished or lost function.

Signs and Symptoms

- · Weakness and loss of muscle
- co-ordination
- Tingling, numbness, dizziness
- Blurred vision
- Pain
- Heat sensitivity
- Loss of bladder control
- Memory loss, problem-solving difficulties
- Mood disturbances

Western Drug Therapies

Your patient may already take the following Western Medication:

- Steroids with anti-inflammatory properties (e.g. prednisone) to reduce severity of attacks.
- Beta interferon to decrease myelin destruction, reduce frequency and severity of attacks, and slow progression of disease.
- Immunotherapy, antigen-targeting, cytokines, and remyelination are experimental therapies that may alter the course of the disease.

TCM Pattern Differentiations

Overview

During the acute period, a common pattern presentation is kidney and liver yin vacuity with concurrent phlegm and blood stasis. In addition, treatment with steroids tends to give rise to pathogenic fire which exacerbates the already present yin vacuity¹. Treatment includes herbs that

nourish kidney and liver yin, transform phlegm and move blood.

Over time, kidney yin vacuity is likely to change into a vacuity of both yin and yang. Thus, herbs are added that supplement yang. Also, more stasis moving herbs may be needed, including herbs that move liver qi. As stasis may transform into heat, heat clearing herbs may also be added.

Theory behind the symptoms

The liver stores blood and opens at the eyes; hence there is a strong connection between the state of the liver and the state of the eyes. Liver yin/blood vacuity may impair vision.

Blood and yin deficiency may give rise to internal wind, manifesting as spasms. The spleen governs the movement and transformation of food and water, and is the source of qi and blood formation. It also governs the flesh and limbs. Hence, the nourishment of the body's flesh relies on the correct function of the spleen, and if spleen function is disturbed this may lead to lack of strength, impaired use and even atrophy of the muscles.

The kidney is the root of earlier heaven; it governs the bones and engenders marrow. The brain is considered the "sea of marrow", and the kidney not engendering marrow may cause "emptiness of the sea of marrow", manifesting as slow thinking, forgetfulness and dizziness. Also, the

function of the bladder to store and discharge urine relies on the kidney.

Phlegm is engendered when the spleen function of movement and transformation of fluids is impaired, and may manifest in symptoms such as clouded spirit, numbness or heaviness of the limbs, or dizziness. Blood stasis may be caused by several factors, e.g. an impaired spleen causing qi vacuity and hence qi lacking adequate force to move the blood. Other causes are blood deficiency, qi stagnation, blood cold or blood heat. The primary symptom of blood stasis is pain in a fixed location.

Pattern Differentiation

According to Flaws and Sionneau², "the single most commonly seen pattern of MS in real-life Western patients is gi and yin dual vacuity,3 meaning spleen gi and liver kidney-yin vacuity." However, Flaws and Sionneau further expound that "it is the rule rather than the exception that there will be five or more concomitant patterns in cases of MS".4 They advise "whenever there are such complicated patterns, one should first identify all patterns present in order of predominance; two, state the requisite treatment principles for each of those patterns in the same order; and thirdly, compose on an ad hoc basis a treatment plan that addresses all those patterns in the same proportions and with the same priorities."5

Treatment Strategies and Medicinals
Treatmentstrategies centreon supplementing
liver and kidney, transforming phlegm and
quicken blood stasis, and strengthening the
spleen.

Care has to be taken in kidney supplementation so that the often times cloying nature of kidney supplements does not cause obstruction. This can be prevented by adding warming and freeing



medicinals. Medicinals often used are Rou Cong Rong [Cistanche], Suo Yang [Cynomorium dongariorum], Nu Zhen Zi [Ligustrum], Tu Si Zi [Cuscuta], and Xian Ling Pi [Epimedium] to supplement kidney essence and strengthen kidney qi. *Liu Wei Di Huang Wan* [Rehmannia Six Formula] with He Shou Wu [Ho Shou Wu] supplements liver and kidney, nourishes the blood, increases essence and astringes jing qi.

To transform dampness, warming and transforming medicinals are used such as Ban Xia [Pinellia] and Shi Chang Pu [Acorus]. To address blood stasis and phlegm, medicinals are used that move blood and transform stasis, and warm yang and free the network vessels. Examples are Ji Xue Teng [Milettia], Dan Shen [Salvia], Chuan Xiong [Cnidium], Yi Mu Cao [Leonorus], E Zhu [Zedoaria], Hong Hua [Carthamus], Niu Xi [Achyranthes]. These are used along with Gui Zhi [Cinnamon Twigs], Mu Gua [Chaenomeles] and Yi Zhi Ren [Alpinia].

When qi flows correctly, blood flows naturally and phlegm is eliminated. Thus, in addition to above blood moving and phlegm transforming medicinals, one should add supportive medicinals that strengthen the spleen, rectify qi, or free the network vessels (as enduring diseases enter the network vessels). Examples are Bai Zhu [Atractylodes, white], Shan Yao [Dioscorea], Sha Ren [Cardamon], Dang Shen [Codonopsis] to strengthen the spleen, adding medicinals like Chen Pi [Citrus] to rectify qi.

Clinical Studies

In a study by Lu Xi and Wang Yaohuo at the Departments of Neurology and Traditional Chinese Medicine in Fujian^{6,7}, patients were divided into four patterngroups, each of which received treatment according to their pattern. All quantities refer to raw herbs.

 Liver and kidney yin deficiency: Zuo Gui Wan Jia Wei [Left Restoring Pill Modified], with the addition of Zhi Mu [Anemarrhena], Nu Zhen Zi [Ligustrum], Dan Shen [Salvia], Dang Gui [Angelica Sinensis], and Bai Shao [White Peony]. The exact ingredients are: Sheng Di Huang [Rehmannia, raw], Shu Di Huang [Cooked Rehmannia] Gou Qi Zi [Lycium Fruit], Zhi Mu [Anemarrhena], Dan Shen [Salvia], Bai Shao [White Peony], Shan Zhu Yu [Cornus], Nu Zhen Zi

- [Ligustrum], Lu Jiao Jiao [Deer Horn Glue], Gui Jia Jiao [Tortoise Plastron Glue], Chun Niu Xi [Achyranthes], Dang Gui [Angelica Sinensis], and Gan Cao [Licorice], 10 to 12 g per day each herb, except licorice which is 5 g per day.
- 2. Spleen-stomach deficiency: Liu Jun Zi Tang Jia Wei [Six Major Herbs Combination Modified] with Huang Qi [Astragalus] and Dan Shen [Salvia] added, 8 to 15 g per day each herb, except Da Zao [Jujube] 12 pieces and Gan Cao [Licorice] 4 g.
- 3. Qi and blood stasis: Combination of Xiao Chai Hu Tang [Minor Bupleurum Combination] with blood moving herbs: Dan Shen [Salvia], Bai Shao [White Peony], Chi Shao [Red Peony], and Chuan Xiong [Cnidium], plus Huang Qi [Astragalus], Sheng Di Huang [Rehmannia, raw], and Dang Gui [Angelica Sinensis], minus, Sheng Jiang [raw Ginger] and Da Zao [Jujube]. 9 to 15 g per day each herb, except Gan Cao [Licorice] 4 g.
- 4. Damp-heat: Qing Hao [Artemisia Annua], Hua Shi [Talc], Bai Shao [Peony], Huang Qin [Scute], Chai Hu [Bupleurum], Zhu Ru [Bamboo], Mu Tong [Akebia], Fu Ling [Hoelen], Zhi Shi [Citrus Sinensis], Ban Xia [Pinellia], Da Huang [Rhubarb], Da Zao [Jujube]. 8 to 12 g each herb, except Da Zao [Jujube] 12 pieces.

Modifications according to accompanying symptoms included:

- Urinary incontinence: add Tu Si Zi [Cuscuta], Yi Zhi Ren [Alpinia].
- Constipation: add He Shou Wu [Hoshou-wu], Tao Ren [Persica], Rou Cong Rong [Cistanche] and Da Huang [Rhubarb].
- Mental fogginess: add Wu Wei Zi [Schizandra].
- Abdominal distention: add Hou Po [Magnolia Bark] and Zhi Shi [Citrus sinensis].
- Muscular atrophy: add Dang Gui [Angelica Sinensis], Xu Duan [Dipsacus] and E Jiao [Gelatin].

Anti-inflammatory Western drugs (dexamethasone or prednisone) were given during acute active periods. Of 32 cases, two cases experienced complete relief from all symptoms after taking 45 and 68 doses; 15 were markedly improved and 15 somewhat improved. Generally it took 20 to 40 doses to achieve these results.

Case study by Professor Liu You Zhang, recorded by Dr Zhou Jun Liang⁸

35-year old female. One year ago she started to experience numbness and weakness in the extremities, blurred vision and a stiff neck. She was diagnosed with MS and underwent Western medical treatment, which improved her situation slightly. Two months ago, her condition worsened. She again experienced numbness in her extremities, and she didn't have the strength to lift or even hold objects. She also experienced difficulties walking and had no appetite. Pale red tongue, white coating, weak pulse.

Pattern Differentiation: Spleen stomach vacuity, leading to lack of nourishment of sinews and muscles.

Treatment: Supplement the middle and benefit qi with *Bu Zhong Yi Qi Tang Ji Jian* [Ginseng & Astragalus Combination Modified]. All quantities in raw herbs: Huang Qi [Astragalus] 30 g, Tai Zi Shen [Pseudostellaria] 30 g, Gan Cao [Licorice] 10 g, Bai Zhu [Atractylodes, white] 15 g, Wu Gua Long [Herba Tetrastigmae Hypoglauci] 30 g, Chen Pi [Citrus] 5 g, Niu Da Li [Radix Millettiae Speciosae] 30 g, Qian Jin Ba [Flemingia philippinensis root] 30 g, Chai Hu [Bupleurum] 10 g, Sheng Ma [Cimicifuga] 10 g, Dang Gui [Angelica Sinensis] 10 g.

After seven doses, the numbness was reduced and she felt a little more strength, no other change was noted. Ji Nei Jin [Endothelium Corneum Gigieriae Galli] 10 g (raw herb) was added to her original prescription, and the patient took another seven doses of the altered prescription. There was further improvement concerning her numbness and weakness, but the blurry vision and stiff neck remained unchanged.

Ji Xue Teng [Milettia] 20 g and Nu Zhen Zi [Ligustrum] 15 g were added to her original prescription (all quantities in raw herbs). After taking this adjusted prescription for 14 days, all above symptoms improved considerably. The thus improved prescription was used as a base prescription for long-term treatment, with modifications according to the symptoms at a particular point in time.

Professor Liu You Zhang advises his patients that in MS relapses and recuperation tend to alternate. Hence, even if all symptoms seem cured one should not become careless and continue long-term treatment for at least one to two years.

Case Study by Dr Qin Liangfu9

45-year old female, has been experiencing lack of strength in the lower limbs and has been unable to walk without support for 10 years. She experiences frequent dizziness, impaired eyesight, numb fingers, cold lower arms and legs, constipation and incontinence. When the symptoms started she was diagnosed with MS, which has relapsed nine times since the diagnosis. The symptoms are exacerbated during winter and spring. At her first Chinese Medicine consultation, additional observations were: Thin body, dark red tongue body, thin coating, fine and string-like pulse.

Pattern Differentiation: Liver kidney yin vacuity, ascendant liver yang.

Treatment: Decoction (all quantities in raw herbs): Gou Qi Zi [Lycium Fruit] 25 g, Huang Qi [Astragalus 30 g, Huang Jing [Polygonatum Root] 15 g, Dan Shen [Salvia] 9 g, Chuan Xiong [Cnidium] 9g, Bai Zhi [Angelica] 9g, Qiang Huo [Notopterygium] 9 g, Du Huo [Tu Huo] 9 g, He Shou Wu [Ho Shou Wu] 30 g, Dang Gui [Angelica Sinensis] 6 g, Shu Di Huang [Rehmannia, cooked] 15 g, Bai Shao [White Peony] 9 g, Hong Hua [Carthamus] 9 g, Niu Xi [Achyranthes] 15 g, Sang Zhi [Mulberry Twig] 15 g, Jin Ying Zi [Rosehips] 30 g, Sang Piao Xiao [Ootheca Mantidis] 30 g, Ye Jiao Teng [Polygonum Stem 30 g, He Huang Pi [Albizzia] 30 g, Huo Ma Ren [Hemp Seeds] 30 g, Tai Zi Shen [Radix Pseudostellariae] 30 g, Ling Yang Jiao Fen [Pulvis Cornu Antelopis] 0.6 g, Shi Jue Ming [Concha Haliotidis] 30 g, Tian Ma [Gastrodia Root] 25 g. Taken daily.



Acupuncture: Bai Hui [GV 20], Yin Tang [Extra], Shuai Gu [GB 8], Feng Chi [GB 20], Tou Lin Qi [GB 15], Jian Yu [LI 15], Qu Chi [LI 11], Wai Guan [SJ 5], Feng Shi [GB 31], Zu San Li [ST 36], San Yin Jiao [SP 6], Tai Chong [LV 3]. Every second day for 20 minutes. After extracting the needles, the patient received Huo Guo therapy on the back.

The patient also received a herbal foot bath to soak her feet daily for 20 minutes. After one month of treatment, the patient went back home to Europe and continued with the herbal prescription and Huo Guo therapy for almost one year. That winter

she was stable and did not experience a relapse as in previous years. She still had difficulty walking, though, and felt numbness and weakness in the calves, especially the left one. The extremities felt stiff, she passed stool every three days, the sides of the tongue were red with little coating, and the pulse was string-like. Upon her return to China, the previous prescription was modified to the following: Gou Qi Zi [Lycium Fruit] 25 g, Huang Qi [Astragalus] 30 g, Huang Jing [Polygonatum Root] 15 g, Chuan Xiong [Cnidium] 9 g, Bai Zhi [Angelica] 9 g, Qiang Huo [Notopterygium] 9 g, He Shou Wu [Ho Shou Wu] 30 g, Dang Gui [Angelica Sinensis] 9 g, Ju Hua [Chrysanthemum] 9 g, Shu Di Huang [Rehmannia, cooked] 15 g, Bai Shao [White Peony] 9 g, Hong Hua [Carthamus] 9 g, Niu Xi [Achyranthes] 15 g, Duan Mu Li [Oyster Shell] 30 g, Zhe Bei Mu [Fritillaria] 15 g, Xuan Shen [Scrophularia] 15 g, Zhi Gan Cao [Radix Glycyrrhizae Uralensis Preparata] 6 g, Tai Zi Shen [Radix Pseudostellariae] 30 g. Shi Jue Ming [Concha Haliotidis] 30 g, Tian Ma [Gastrodia Root] 15 g, Fan Xie Ye [Senna Leaf] 3 g, Sheng Da Huang [Hou Xia] 3 g.

The foot bath and acupuncture was performed as before. After one month, her walking ability and dizziness had steadily improved. The patient was able to gradually reduce her doses of interferon and her other Western Medication. She continues her Chinese Medicine at home with stabilising results.

Formulas increasing the effectiveness of steroid drugs

Ren Shen Yang Rong Tang [Ginseng Nutritive Combination]. In Japan, this formula is used to increase the effectiveness of prednisolone, a steroid drug that may be used in cases of MS to reduce symptoms during relapses.¹⁰

Traditional Indication: Qi and blood vacuity with vacuity cold, heart blood vacuity and lung qi vacuity. Addressing symptoms such as forgetfulness, sweating, feverishness, shortness of breath, cough, sputum, cold extremities, no vigour, tires easily, pale complexion, dizziness, blurred vision, muscle spasms.

Sheng Mai San [Ophiopogon Combination] relieves respiratory distress in cases of MS and increases the effectiveness of most of the steroid drugs used to treat MS.¹¹

References available on request.