

Clinical Experience in the Treatment of Systemic Lupus Erythematosus

Shen Pi'an

ABSTRACT

Systemic lupus erythematosus (SLE) is a chronic multisystem inflammatory autoimmune disease with a complex and highly variable range of symptoms that can affect any part of the body. Based on Professor Shen's 50 years' clinical experience in treating SLE patients with Chinese medicine, this article summarises the main aspects of TCM aetiology and pathology as well as offering a practical insight into the main treatment principles he employs on a regular basis.

KEYWORDS: Systemic lupus erythematosus (SLE), autoimmune disease, Chinese herbal medicine, acupuncture, integration of Chinese and Western medicine.

INTRODUCTION

Systemic lupus erythematosus (SLE) is a chronic multisystem inflammatory autoimmune disease affecting the skin, joints, tendons and other connective tissues, and various organs. It is a highly complex and changeable condition and extremely variable in its clinical manifestations, which include high or low fever, erythema (often butterfly-shaped on the cheeks and across the bridge of the nose), photosensitivity, purpura, livedo reticularis (a marbled mottling of the skin), Raynaud's phenomenon, hair loss, vasculitis, arthritis (most commonly involving the small joints of the fingers and toes), myalgia, anaemia, leucopenia, thrombocytopenia, swollen lymph nodes, pleurisy and other lung disorders, pericarditis and other heart disorders, kidney disorders (lupus nephritis), gastrointestinal disorders, nervous system disorders, eye lesions, and susceptibility to infection. Manifestations vary from person to person and in the same individual over a period of time. Figure 1 summarises the main clinical features of SLE (percentages refer to the proportion of patients affected).

The severity of the disease ranges from mild to debilitating depending on the pattern and degree of organ involvement. In most patients, the disease follows a chronic and unpredictable course; some people may experience a relentless progression punctuated by short periods of complete remission, whereas others may suffer from short-lived recurrences or flares that persist for several weeks to several months before disappearing.

SLE occurs worldwide, with estimated prevalence rates among adult women ranging from 90 to 400 per 100,000. The disease mainly affects the young and middle-aged, with a

Eyes (25%)

Retinal vasculitis
Dry eyes

Mouth ulcers (20%)

Skin (70-75%)

Butterfly erythema
Photosensitivity
Discoid erythema

Heart (25%)

Pericarditis
Myocarditis

Liver enlargement (30%)

Hands (20%)

Nail fold vasculitis
Nail lesions
Raynaud's phenomenon

Joint pain (90%)

Hands, feet, wrists,
elbows, knees

Legs

Livedo reticularis
Purpura

Alopecia

Nervous system (60%)

Headaches
Depression
Fits
Polyneuropathy

Lungs (60%)

Pleurisy/pleural effusion
Interstitial lesions
Recurrent secondary infection

Kidneys (30%)

Glomerulonephritis
Proteinuria
Hypertension

Abdomen

Distension/pain
Bowel function changes

Blood

Anaemia
Leucopenia
Thrombocytopenia

General

Fever (50%)
Fatigue
Susceptibility to infection

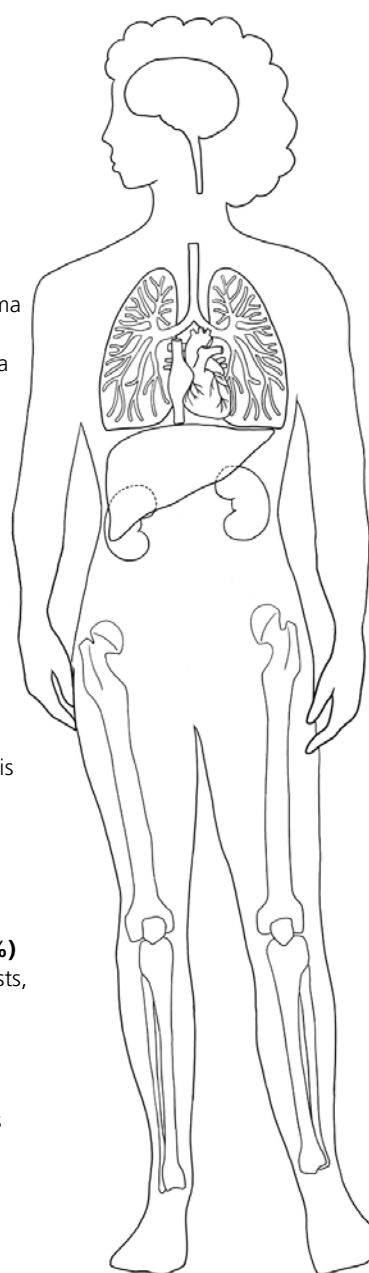


FIGURE 1 Main clinical features of SLE

peak age of onset between 20 and 40; women outnumber men in a ratio of 7–10:1.

The exact cause of SLE is as yet unknown, but there appear to be a number of predisposing factors, principally involving heredity, sex hormones, impaired autoimmunity, environmental influences (notably, sunlight or artificial ultraviolet radiation), and infection.

AETIOLOGY AND PATHOLOGY

I am often asked whether SLE is a deficiency or an excess pattern. And if it is a deficiency pattern, whether it is deficiency caused by disease or disease caused by deficiency. After observing more than 1,000 in-patients treated for SLE in my hospital (Shanghai Traditional Chinese Medicine Hospital), I have come to the conclusion that SLE is a disease caused by deficiency.¹

The root of the disease is constitutional deficiency and depletion of true *yin*, resulting in a situation of root deficiency and manifestation excess. The principal cause is internal Heat due to *yin* deficiency. In illnesses that have persisted for a long period, deficiency of *qi* and *yin*, or *yin* and Blood, or *yin* and *yang* may exist, and several of the *zang fu* organs may be deficient; at the advanced stage, *yin*, *yang*, *qi*, and Blood will all be deficient. Retained Heat, exuberant Fire, Heat Toxins, Blood-Heat, Blood stasis, Wind-Damp, and accumulation of Water and Retained Fluids represent the manifestations.

The basic aetiology and pathology of SLE relate principally to constitutional weakness, insufficiency of true *yin*, internal exuberance of stasis-Heat, obstruction of the vessels and network vessels, external pathogenic factors invading the skin and flesh, and internal damage to the *zang fu* organs. Flares of the disease are usually triggered by external contraction of pathogenic factors, over-exertion, emotional disturbance, trauma, sun exposure, and childbirth.

The disease is located in the channels, network vessels and Blood vessels. It mainly involves the Triple Burner, but is also closely related to the Spleen and Kidneys and may spread to affect every area and every organ and tissue of the body as well as *ying qi* and the Blood.

At the initial stage, the disease manifests in the exterior with obstruction of the vessels and network vessels of the extremities; later on, it spreads from the exterior into the interior, from the vessels and network vessels of the extremities into those of the *zang fu* organs. Then it damages the substance of the *zang fu* organs. Internally, involvement spreads gradually downward from the Upper Burner to the Middle Burner and then to the Lower Burner, progressing from mild to serious and from superficial to deep. The disease is more severe in the interior and the lower body than in the exterior and the upper body. Multiple organ involvement indicates a serious case. If all the *zang fu* organs are deficient and the disease then moves back up through the Triple Burner to the Brain, the case is critical.

Constitutional deficiency and depletion of true *yin*

SLE mainly arises as result of a congenitally weak constitution, *yin-yang* disharmony, and depletion of Kidney *yin*. There are three mechanisms involved when the predominating factor is *yin* deficiency:

- The Kidneys are the Root of Earlier Heaven. When Earlier Heaven true *yin* (Kidney *yin*) is insufficient, Water cannot restrain Fire, meaning that Kidney-Fire is easily stirred up.
- Women pertain to *yin* in substance and *yang* in function; *yin* is often insufficient and *yang* is often in surplus.
- When a pathogenic factor enters the *yin* aspect, it will cause obstruction. In a protracted illness, *yin* will be damaged and *yin qi*, *yin*-Blood, *yin*-Fluids, and *yin*-Essence will be consumed by retained Heat.

There are also three mechanisms involved when the main cause of SLE is exuberant Fire:

- Young adults are at the stage in their lives where *qi* and Fire are exuberant, with Water likely to be depleted and Fire exuberant, frequently resulting in hyperactive Fire due to *yin* deficiency.
- External pathogenic factors often invade the body when *zheng qi* is deficient, resulting for instance in Wind-Cold transforming into Heat or Damp-Heat accumulating internally or Heat Toxins becoming exuberant.
- In terms of Essence-related causes, sexual intemperance stirs the Ministerial Fire, resulting in depletion of Water in the lower part of the body and Fire flaming upward; *yin* Fire consumes true *yin*, making it more depleted. Postpartum, the hundred vessels are empty and the Essence and Blood will have been consumed, Kidney-Water will be depleted and Kidney-Fire cannot be restrained; internal Fire will become rampant and blaze upward, resulting in an abrupt outburst of raging fever and a sudden flare-up of the disease.

In addition, excessive stimulation of the metabolism due to the use of corticosteroids, with drug Toxins transforming into Heat, is another clinical cause of exuberant Fire. Although not at the origin of the disease itself, it should nevertheless be taken into account in pattern identification.

External contraction of pathogenic factors

SLE is often triggered or exacerbated by invasion of pathogenic factors.

- If Wind-Cold attacks the body from the exterior and then invades through the interstices (*cou li*), it may combine with *qi* and Blood to obstruct the channels and network vessels. Wind-Cold may subsequently transform into Heat, which over time will damage *yin*.

- In summer, if Summerheat is exuberant, sunlight scorches the skin, allowing Summerheat to invade the body, resulting in internal exuberance of Blood-Heat, which manifests as a red face with erythema or prolonged high fever or lingering low-grade fever.
- Pathogenic Dryness damages Body Fluids; depletion of Body Fluids and Blood-Dryness will cause dry mouth and eyes.
- Stagnation of Wind-Damp leads to *Bi* syndrome obstruction, resulting in aching and painful joints.

If an exterior pattern is not resolved and pathogenic factors pass into the interior, they may lodge in the *yin* aspect of the body to cause obstruction. If there is true *yin* deficiency internally and pathogenic factors transform into Fire externally, external Fire may stir internal Fire and cause an attack of SLE. Raging fever or deficiency fever in an SLE episode can damage the skin and network vessels externally and injure the *ying* and *xue* levels, the *zang fu* organs and the Triple Burner internally. The condition will then gradually deteriorate.

Static Blood obstructing the network vessels

Heat in the Blood leads to Blood stasis, Cold in the Blood leads to Blood congealing. Irrespective of whether insufficiency of true *yin* leading to depletion of Water and effulgence of Fire or whether external contraction of pathogenic factors is involved, stagnation will transform into Heat; and when Blood and Heat bind, stasis-Heat will occur. Therefore, SLE is much more likely to present with stasis-Heat than with stasis-Cold.

At the acute stage or when the disease is active during the chronic stage, most patients will have signs of internal Heat and exuberant Fire, with stasis-Heat developing into Blood-Heat in about 90 per cent of these cases. Manifestations of stasis-Cold may occur in the later stages of Spleen and Kidney deficiency patterns of the disease.

- If stasis-Heat obstructs the vessels and network vessels in the exterior, it will result in stasis spots (petechiae) disseminated over the hands, a sensation of heat in the palms and soles and the centre of the chest, and swollen and painful joints.
- If stasis-Heat obstructs the Upper Burner, the waterways will not be regulated properly; when Water meets stasis-Heat, these factors will accumulate to form Retained Fluids, which will gather below the Heart or be suspended in the hypochondrium, thus damaging the network vessels of the Heart, Lungs and Pericardium.
- If stasis-Heat obstructs the Middle Burner, then the Spleen, Stomach, *ying qi*, and Blood will be damaged. Insufficient *qi* and Blood will be generated and transformed, *yin*-Blood will become depleted and the Essence will leak away, resulting in proteinuria and haematuria. In cases of hyperactive Fire due to *yin* deficiency, Heat will force the Blood to move frenetically and spill out of the vessels, leading to spontaneous external bleeding and purpura.

- If stasis-Heat obstructs the Lower Burner, the Liver and Kidneys will be damaged, the Water passages will not be regulated properly and the Essence will leak away, resulting in proteinuria, anaemia, lower backache, oedema, and ascites, and also gradually leading to deficiency of *qi*, Blood, *yin*, and *yang* with waning of Fire at the Gate of Vitality.
- Obstruction by stasis-Cold will give rise to long voidings of clear urine or frothy urine, with persistent oedema that does not disappear even when treated with diuretics. Where the condition persists, urine gradually becomes scant and urination becomes difficult. As stasis Toxins accumulate, severe uraemia will develop.
- If stasis-Heat ascends to the Brain, the Brain Marrow will be affected, resulting in headaches that gradually worsen and occasional convulsions; coma or paralysis may occur in very severe conditions.

Obstruction of the channels and network vessels

In SLE patients, the channels and vessels are obstructed and *qi* and Blood do not circulate smoothly, leading to stasis of Blood in the vessels, *yin-yang* disharmony and impairment of *zang fu* organ functions. Damage by stasis can affect any part of the body from the head to the extremities, any of the *zang fu* organs, the sinews, bones, flesh and skin, and the primary channels and the small network vessels. In mild cases, the skin and flesh are affected, but in more severe cases the *zang fu* organs will be deficient.

- If the Heart vessels are obstructed, damage to the Heart will lead to blockage of Blood vessels, resulting in palpitations, dyspnoea and fullness in the chest.
- If the Lung vessels are obstructed, damage to the Lungs will lead to impairment of the Lungs' downward-bearing function and failure to regulate the Water passages, resulting in cough, dyspnoea and retention of Phlegm-Fluids.
- If the Liver vessels are obstructed, damage to the Liver will lead to Liver depression and counterflow of Liver *qi*, thus impairing the Liver's functions of ensuring the orderly movement of *qi* and storing the Blood, resulting in dizziness and pain in the hypochondrium.
- If the Spleen vessels are obstructed, damage to the Spleen will lead to insufficiency of *ying qi* and Blood and impairment of the source of generation and transformation, resulting in shortage of blood and weak limbs.
- If the Kidney vessels are obstructed, damage to the Kidneys will cause significant leaking of the Essence, resulting in lower backache and oedema.
- If the channels and network vessels in the limbs are obstructed, the joints and muscles will be aching and swollen.
- If the grandchild network vessels (*sun luo*), the superficial network vessels (*fu luo*) and the cutaneous regions (*pi bu*) are

involved, this will lead to stasis of Blood in the vessels, resulting in erythema and rashes, and clusters of stasis spots (petechiae) on the hands and feet.

Obstruction of the Triple Burner

The Triple Burner has two physiological functions: one is to move *qi*, functioning as the passageway for the circulation of original *qi*, the other is to move Water, ensuring the free flow of Water and Body Fluids. Obstruction of the Triple Burner in SLE patients may lead to disease patterns of failure of the regulation and movement of *qi* and Fire and accumulation of Water and Retained Fluids.

Impairment of the movement of *qi* and Fire

Both original *qi* arising from Earlier Heaven and *ying qi* and *wei qi* arising from Later Heaven pass through the Triple Burner and the channels and network vessels to be distributed throughout the body and fill the five *zang* and six *fu* organs. The Ministerial Fire lodges in the Liver, Kidneys and Triple Burner, and the Triple Burner is also the passage for various types of Fire.

When the Triple Burner functions smoothly, all *qi* in the body flows smoothly and all Fire in the body circulates endlessly. In SLE patients, the Triple Burner is obstructed, *qi* and Blood do not flow smoothly and there is disharmony between *ying qi* and *wei qi*. Insufficiency of *ying qi* and Blood and loss of control of the defensive exterior means that *qi* is deficient and pathogenic factors can invade, with external Fire stirring internal Fire. Fire diffused throughout the Triple Burner or exuberant Heat in the *qi* and *ying* levels leads to non-abating raging fever.

In some patients, hyperactive Fire due to *yin* deficiency leads to continuous low-grade fever with pathogenic Fire boiling and consuming Body Fluids, Essence and Blood. In the Upper Burner, this results in Body Fluids drying up, leading to dry mouth and eyes, and thirst with a desire for cold drinks; in the Middle Burner, impairment of the source of generation of *ying qi* and Blood leads to dizziness due to Blood deficiency; and in the Lower Burner, leakage of the refined Essence leads to proteinuria and haematuria. External manifestations include a red face and hot skin or ice-cold limbs or pale hands, brittle nails, ulceration or erosion of the tips of the digits, and dry hair with hair loss.

Disturbance of the transportation of Water

The Triple Burner is the organ responsible for dredging the Water passages and transporting Water. The metabolism of Water throughout the body, from absorption by the Spleen and Stomach to percolation into the Bladder and excretion out of the body, is performed through the action of the Triple Burner in transforming *qi* and freeing the Water passages. If the Triple Burner is damaged, the Water passages will be obstructed and Water cannot be moved nor can *qi* be transformed.

When Water accumulates in the Upper Burner outside the Lungs, it leads to pleural effusion; when it accumulates outside the Heart in the Pericardium, it leads to pericardial effusion; when it accumulates in the eyes, it will cause dim vision; and when

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it accumulates in the skull, it will lead to headache and loss of consciousness. As Water accumulates in the Middle Burner, it will cause drum distension and ascites. If the functions of the Lower Burner are inhibited, this will lead to difficult urination and puffy lower limbs and, in serious cases, to oedema in the lower back, abdomen and genital region.

When Water in the Triple Burner floods over, ascending to the head, face and eyes, accumulating in the chest and abdomen, and inundating the legs and feet, it will cause severe oedema throughout the body as water pervades everywhere. These are the clinical manifestations of effusions occurring in SLE serositis and the hypoproteinemia encountered in lupus nephritis. Oedema of the inner ear and eye fundus and intracranial oedema are serious complications of SLE.

CLINICAL NOTES ON TREATMENT PRINCIPLES

The basic pathological changes of SLE are immune function disorder, extensive vasculitis, and oedema, degeneration and necrosis of connective tissue. These three aspects combine to provoke widespread systemic damage. Provided that the basic pathological changes can be controlled, then the overall state of the disease can also be controlled.

The TCM tradition in classical herbal formulas is that the dosage of the sovereign materia medica is higher than the standard dosage; in the treatment of SLE, I generally recommend a dosage of approximately 30g. This higher dosage is used firstly because the disease is serious and secondly because many patients will already have taken large doses of Western drugs. If the dosage of Chinese materia medica is too low, serious cases will not be treated adequately and acute cases will fail to respond. Although the dosage is high, the volume should not be too large as this will influence the concentration of the decoction; hence, bulky materia medica with mild properties should be used sparingly.

In SLE, the condition may be acute or chronic, mild or serious. The majority of chronic SLE patients will need to take Chinese materia medica for approximately three months to achieve an improvement in their general condition and in specific symptoms. For some particularly stubborn chronic symptoms such as proteinuria,

significant effects are unlikely to be seen during the first year. Once SLE is in remission, long-term follow-up, frequent investigations and regular intake of medication are needed to consolidate the results and prevent relapse.

The main treatment principles for SLE are described in more detail below.

Nourishing *yin*

As noted earlier, the majority of SLE patients present with a deficiency pattern, with most of these exhibiting a pattern of internal Heat due to *yin* deficiency. Therefore nourishing *yin* is a major treatment principle for SLE and includes four aspects – supplementing *yin*, clearing Heat, generating Body Fluids, and moistening Dryness.

Nourishing *yin* is an essential treatment principle when treating SLE. My empirical formula *Hong Ban Tang* (Erythema Decoction) uses large doses of the principal ingredients *sheng di huang* (*Rehmanniae Glutinosae Radix*), *xuan shen* (*Scrophulariae Ningpoensis Radix*) and *zhi mu* (*Anemarrhenae Asphodeloidis Rhizoma*) combined with Heat-clearing and Blood-cooling materia medica. I use it for SLE symptoms such as fever (including low-grade fever and a sensation of internal Heat), erythema, skin rash, joint swelling and pain, vasculitis, purpura, ecchymosis, dry mouth and eyes, mouth ulcers, myocardial damage, proteinuria, haematuria, and chronic renal failure.

Yin-nourishing materia medica are mostly sweet in taste and cold in nature. There are four main aspects to their actions:²

- Immune system regulation, enhancing impaired cell-mediated immunity and inhibiting overactive humoral immunity, thus alleviating chronic inflammation.
- Promoting secretion of the salivary, gastric and intestinal glands, thereby generating fluids, nourishing the Stomach and moistening Dryness to increase saliva, promote digestion and soften the stools.
- Temperature regulation: long-term administration of *sheng di huang* (*Rehmanniae Glutinosae Radix*), *xuan shen* (*Scrophulariae Ningpoensis Radix*), *shi hu* (*Dendrobii Herba*), and *zhi mu* (*Anemarrhenae Asphodeloidis Rhizoma*) abates low-grade fever and dissipates internal Heat.
- A weak cardiotoxic action, with long-term administration treating chronic myocardial damage by nourishing and supplementing the Heart, without cardiac side effects. *Sheng di huang* (*Rehmanniae Glutinosae Radix*) and *xuan shen* (*Scrophulariae Ningpoensis Radix*) dilate the blood vessels and inhibit inflammation of the vessels and joints.

Nourishing *yin* builds up the physique of patients with a *yin* deficiency constitution – *Liu Wei Di Huang Wan* (Six-Ingredient *Rehmannia* Pill), *Da Bu Yin Wan* (Major *Yin*-Supplementation Pill) and *Zeng Ye Tang* (Decoction for Increasing Body Fluids) may be

taken for long periods to help reduce the likelihood of colds and infections.

Acupuncture and moxibustion may be integrated into an overall treatment strategy. Commonly used points for nourishing *yin* in SLE include Bl 23 *shen shu*, Sp 6 *san yin jiao*, Ki 6 *zhao hai*, Ki 3 *tai xi*, and Ki 2 *ran gu*. It is important to bear in mind the need for flexibility in modifying the points according to changes in symptoms alongside the development of the disease. For instance, for severe fatigue and lack of strength, Ren 4 *guan yuan* and St 36 *zu san li* may be added to regulate and nourish *qi* and Blood. For patients manifesting with poor appetite and loose stools, Bl 20 *pi shu* and Sp 9 *yin ling quan* can be added to fortify the Spleen and clear Damp-Heat. For persistent low-grade fever, Li 11 *qu chi* and Li 4 *he gu* can be added to clear internal Heat and abate fever. For patients manifesting with irritability and insomnia, palpitations and forgetfulness, Bl 15 *xin shu* and Ht 7 *shen men* can be added to clear the Heart and bear Fire downward, quiet the Spirit and settle the Mind.

Clearing Heat

Clearing Heat, another major treatment principle for SLE, includes four aspects – clearing Heat and nourishing *yin*, clearing Heat and cooling the Blood, clearing *qi* level Heat and cooling the *ying* level, and clearing Heat and relieving Toxicity. This treatment principle is used for symptoms of high or low-grade fever or internal Heat due to exuberant Heat, deficiency Heat, Blood-Heat, or Heat Toxins.

Most of the Heat-clearing materia medica used in my hospital to treat SLE are sweet and cold or very cold, although a few are bitter and cold. Their action in clearing Heat is stronger than that exerted by *yin*-nourishing materia medica. Most have the action of clearing Heat and cooling the Blood or clearing *qi* level Heat and cooling the *ying* level, although a few can clear Heat and relieve Toxicity.

Apart from their Heat-clearing function, these materia medica are used in the treatment of SLE to lower the body temperature, cool the Blood, transform stasis, free the network vessels, and nourish *yin*. My empirical formulas *San Shi Tui Re Tang* (Three Stones Decoction for Abating Fever), *Hong Ban Tang* (Erythema Decoction) and *Xiao Ban Tang* (Decoction for Dispersing Erythema) include Heat-clearing materia medica such as *sheng shi gao* (*Gypsum Fibrosum Crudum*), *huang qin* (*Scutellariae Baicalensis Radix*) and *jin yin hua* (*Lonicerae Flos*) in combination with materia medica for nourishing *yin*, invigorating the Blood, freeing the network vessels, and transforming Retained Fluids. These formulas are used to treat high or low-grade fever, a sensation of internal Heat, vasculitis, mouth ulcers, arthritis, and pericarditis in SLE patients as well as for erythema and photosensitivity.

The majority of the Heat-clearing materia medica used in these formulas can inhibit the body's temperature-regulating mechanism. *Sheng shi gao* (*Gypsum Fibrosum Crudum*) has a strong antifebrile effect, but since this effect diminishes rapidly, this medicinal is often used in combination with *zhi mu* (*Anemarrhenae Asphodeloidis Rhizoma*), which has a weaker but longer-lasting effect.

Since Heat in SLE is mostly internal Heat or deficiency Heat due to an enduring illness damaging *yin*, selection of acupuncture points should not only focus on clearing Heat, but also on nourishing *yin*, cooling the Blood and relieving Toxicity. We use points such as Du 14 *da zhui*, Du 13 *tao dao*, P 5 *jian shi*, SI 3 *hou xi*, Sp 6 *san yin jiao*, and Ki 7 *fu liu* to clear Heat and nourish *yin*; BL 17 *ge shu*, Ren 3 *zhong ji*, Sp 10 *xue hai*, Sp 6 *san yin jiao*, Liv 3 *tai chong*, and local points at the affected areas to clear Heat and cool the Blood; and pricking to bleed at BL 40 *wei zhong* and the twelve *jing*-well points to clear Heat and relieve Toxicity.

For patients with high fever due to pathogenic Heat in the *qi* level that cannot be relieved and does not enter the *ying* level, points such as P 5 *jian shi*, P 8 *lao gong*, Ki 7 *fu liu*, and Ki 1 *yong quan* can be selected. In addition, pricking to bleed can be employed at Lu 5 *chi ze*, BL 40 *wei zhong* and the twelve *jing*-well points to clear *qi* level Heat and cool the *ying* level.

Invigorating the Blood

Invigorating the Blood and transforming stasis is a common treatment principle in SLE. Materia medica with these functions may be either cool or warm. However, for SLE patients with patterns of internal Heat due to *yin* deficiency or to Blood-Heat, Blood-invigorating materia medica that are cool, neutral or slightly warm in nature should be prescribed.

The majority of materia medica in the empirical formulas *Zi Ban Tang* (Purpura Decoction) and *Qing Shen Tang* (Decoction for Clearing the Kidneys) are classified as Blood-invigorating³ and are used in combination with *yin*-nourishing and Heat-clearing materia medica. These formulas are used to treat vasculitis, myocarditis, nephritis, mouth ulcers, erythema, Raynaud's phenomenon, serositis, and osteonecrosis in SLE. The various ingredients of these formulas work by dilating blood vessels to increase blood flow and promote blood circulation, inhibiting platelet aggregation to prevent thrombosis and promote blood circulation, regulating vascular permeability and promoting absorption of inflammatory exudate, and inhibiting inflammation.

Acupuncture point combinations selected for the treatment of SLE should generally include points for nourishing *yin*. Suitable points for invigorating the Blood, assisted by nourishing *yin*, include BL 17 *ge shu*, P 3 *qu ze*, Sp 10 *xue hai*, Sp 6 *san yin jiao*, Ki 2 *ran gu*, and St 44 *nei ting*. Local points may be added to free local channel *qi* and invigorate the Blood to alleviate pain.

Dispelling Wind

The treatment principle of dispelling Wind includes dispelling Wind and eliminating Dampness, freeing the network vessels and alleviating pain, and strengthening the sinews and bones. Materia medica for dispelling Wind and freeing the network vessels are warm or cold in nature. Since most SLE patients present with internal Heat, treatment should emphasise freeing with materia medica that are cool, neutral or slightly warm in nature; alternatively, warm and cool materia medica should be used in combination.

My empirical formula *Ren Dong Teng Tang* uses cold-natured *ren dong teng* (Lonicerae Japonicae Caulis) as its principal ingredient in combination with neutral-natured *gang ren gen* (Rhodomyrti Radix) and *chuan niu xi* (Cyathulae Officinalis Radix). This formula is very effective for joint and muscle pain and hyperglobulinemia. Herbs such as *sang zhi* (Mori Albae Ramulus), *hai feng teng* (Piperis Kadsurae Caulis), *qian nian jian* (Homalomenae Rhizoma), and *xi xian cao* (Siegesbeckiae Herba) are neutral in nature with mild clinical actions, so they tend to be used as assistant or courier herbs or as channel conductors to treat arthritis.

In terms of acupuncture points for dispelling Wind, local points can be combined with distal points along the affected channels with the aim of treating both the root and the manifestations. LI 11 *qu chi*, LI 4 *he gu*, GB 31 *feng shi*, GB 34 *yang ling quan*, Sp 6 *san yin jiao*, Ki 3 *tai xi*, and local points at affected joints and muscles can be considered to dispel Wind-Cold and nourish *yin*, dredge the channels and free the network vessels to alleviate pain. For migratory pain, BL 12 *feng men* and Sp 10 *xue hai* can be added to move the Blood, based on the principle of treating Blood to treat Wind, since when Blood moves, Wind is extinguished spontaneously. For severe pain, Du 4 *ming men* and Ren 4 *guan yuan* can be added to augment the source of Fire and rouse *yang qi* in order to dissipate pathogenic Cold.

Supplementing qi

Supplementing *qi* and fortifying the Spleen is a common treatment principle in long-term SLE cases. Materia medica for supplementing *qi* and fortifying the Spleen are used in my hospital to treat SLE patients with nephritis, anaemia and leucopenia, and also for interstitial pneumonia.

Huang qi (Astragali seu Hedysari Radix), *dang shen* (Codonopsis Pilosulae Radix) and *huang jing* (Polygonati Rhizoma) are often used in treatment of patterns of *qi* deficiency and dual deficiency of *qi* and *yin*. *Bai zhu* (Atractylodis Macrocephalae Rhizoma), *gan cao* (Glycyrrhizae Radix) and *da zao* (Ziziphi Jujubae Fructus) are used in combination with *yin*-nourishing and Heat-clearing materia medica – with their warming and harmonising actions, they regulate the Spleen and Stomach to avoid affecting the function of these organs through taking cold-natured materia medica over extended periods.

Since SLE is an autoimmune disease, strong supplementation is generally to be avoided and acupuncture points for supplementation should usually be selected in combination with points for nourishing *yin* and clearing Heat. For instance, for *qi* deficiency or dual deficiency of *qi* and *yin*, I have found that a prescription consisting of St 36 *zu san li*, Ren 6 *qi hai*, Ki 3 *tai xi*, Sp 6 *san yin jiao*, BL 20 *pi shu*, BL 23 *shen shu*, Du 14 *da zhui*, and local points at the affected areas is very useful to supplement *qi* and fortify the Spleen, nourish *yin* and clear Heat.

Enriching the Kidneys

Most materia medica for enriching the Kidneys are warm in nature and have the function of supplementing the Kidneys and warming *yang* in cases of dual deficiency of *yin* and *yang* or

depletion of Kidney-Essence in chronic SLE. Materia medica for nourishing Kidney *yin* are mainly used for chronic lupus nephritis and accompanying hypoproteinemia and anaemia.

In my hospital, we use a combination of *du zhong* (Eucommiae Ulmoidis Cortex) and *xu duan* (Dipsaci Radix) for lupus nephritis with proteinuria and haematuria; it is especially effective in relieving lower backache. *Yin yang huo* (Epimedii Herba), *xian mao* (Curculiginis Orchioideis Rhizoma) and *ba ji tian* (Morindae Officinalis Radix) are also useful for relieving pain in the joints, muscles and lower back. *Tu si zi* (Cuscutae Semen) is traditionally used to supplement the Kidneys and invigorate *yang* and is now commonly employed for splenomegaly and lower backache in SLE patients.

Since enduring illness results in Spleen and Kidney deficiency or deficiency of *yin*, *yang*, *qi*, and Blood, acupuncture and moxibustion can be performed at various points for enriching Kidney-Essence, fortifying the Spleen, and supplementing *qi* and Blood and integrated with other methods into an overall treatment strategy to support *zheng qi* and dispel pathogenic factors.

For instance, for dual deficiency of *yin* and *yang* or depletion of Kidney-Essence in chronic SLE, Bl 20 *pi shu*, Bl 23 *shen shu*, Ren 6 *qi hai*, Ren 4 *guan yuan*, St 36 *zu san li*, Sp 9 *yin ling quan*, Sp 6 *san yin jiao*, Ki 3 *tai xi*, and Liv 3 *tai chong* are particularly useful. Moxibustion may be added at the back-*shu* points and at Ren 4 *guan yuan* and Sp 6 *san yin jiao* to strengthen the effect in enriching Kidney *yin* and supplementing *yang*. For patients presenting with low-grade fever and a sensation of internal Heat, Du 14 *da zhui*, Li 11 *qu chi* and Li 4 *he gu* may be added to reduce body temperature and clear internal Heat. Bl 23 *shen shu*, Ren 6 *qi hai*, Ren 4 *guan yuan*, and St 36 *zu san li* are particularly indicated because of their dual effect of reducing red and white blood cells and protein in the urine and enhancing cellular immunity.⁴

Nourishing the Blood

Most Blood-nourishing materia medica suitable for SLE are warm in nature and may be used in combination with *yin*-nourishing materia medica to treat Blood deficiency symptoms of dizziness, fatigue, a lustreless complexion, and hair loss. Blood-nourishing materia medica are mainly used for anaemia, leucopenia and thrombocytopenia in SLE. A reduced blood cell count in SLE is caused by auto-antibodies and the clinical condition is complex, but it is essential to enhance haematopoiesis.

My empirical formula *Sheng Xue Tang* (Decoction for Generating Blood) uses *zhi he shou wu* (Polygoni Multiflori Radix Praeparata), *shan zhu yu* (Corni Officinalis Fructus), *nu zhen zi* (Ligustri Lucidi Fructus), *huang qi* (Astragali seu Hedysari Radix), and *bai zhu* (Atractylodis Macrocephalae Rhizoma) to nourish and generate the Blood or to supplement *qi* and generate the Blood, thus increasing the numbers of erythrocytes, leucocytes and platelets. *Dang gui* (Angelicae Sinensis Radix), *ji xue teng* (Spatholobi

Caulis), *e jiao* (Corii Asini Gelatinum), and *lu jiao* (Cervi Cornu) are useful for treating anaemia.

In terms of acupuncture and moxibustion, commonly used points for enriching *yin*, supplementing *qi*, and nourishing the Blood in the treatment of dizziness, fatigue and a lustreless complexion include Bl 20 *pi shu*, Bl 23 *shen shu*, Du 4 *ming men*, P 5 *jian shi*, P 6 *nei guan*, Li 4 *he gu*, Sp 10 *xue hai*, St 36 *zu san li*, Sp 6 *san yin jiao*, Ki 3 *tai xi*, and points along the affected channels and at the affected areas. For hair loss, plum-blossom needling at the scalp is often added to the basic prescription to free local *qi* and invigorate the Blood.

Moving Water

The treatment principles of promoting urination, transforming Dampness and cleaning out Retained Fluids are designed to eliminate residual pathological fluids in manifestations such as pleural effusion, pericardial effusion, oedema, and retention of urine.

In my hospital, most of the materia medica used in SLE for moving Water is neutral to cold in nature. *Fu ling* (Poria), *zhu ling* (Polypori Umbellati Sclerotium) and *yi yi ren* (Coicis Lachryma-jobi Semen) also regulate the immune system. For serious cases, the empirical formula *Juan Yin Tang* (Decoction for Cleaning Out Retained Fluids) uses large dosages of *ting li zi* (Lepidii seu Descurainiae Semen), *bai jie zi* (Sinapis Albae Semen) and *sang bai pi* (Mori Albae Cortex Radicis) to clean out Retained Fluids and move Water in order to treat pleural and pericardial effusion, ascites, joint capsule effusion, intracranial oedema, and oedema resulting from serositis, bursitis and hypoproteinemia.

Acupuncture at points for promoting urination, transforming Dampness and cleaning out Retained Fluids can be integrated into the overall treatment strategy. For instance, for pleural and pericardial effusion manifesting as fever with oppression and pain in the chest, select Bl 15 *xin shu*, P 6 *nei guan*, Sp 6 *san yin jiao*, and Ki 3 *tai xi* to clear out Retained Fluids and promote interaction between the Heart and the Kidneys. For swelling in the lower limbs and joint pain due to accumulation of Retained Fluids, select Bl 23 *shen shu*, Bl 28 *pang guang shu*, Ren 9 *shui fen*, St 28 *shui dao*, and Sp 9 *yin ling quan* to move Water, transform Dampness and warm the Kidneys. Moxibustion can be added to enhance the effect.

INTEGRATION OF CHINESE AND WESTERN MEDICINE

In terms of Western medicine, mild cases of SLE can often be relieved by NSAIDs for joint pain and fever or by antimalarials for joint and skin symptoms and fatigue that cannot be controlled by NSAIDs. More severe cases with serious organ involvement or life-threatening symptoms or a rapid progression of the condition will usually be treated from the outset with corticosteroids such as prednisone or prednisolone. Immunosuppressants such as azathioprine or cyclophosphamide may also be given alone or alongside corticosteroids to reduce the immune response, especially in severe cases with kidney, blood vessel or nervous system involvement.

The majority of chronic SLE patients attending Chinese medicine clinics are likely to have been treated with corticosteroids and some

with immunosuppressants. In some patients, SLE will still be active; in others the condition will have been controlled, but steroids cannot be significantly reduced as rebound has previously occurred. Other patients will have experienced major side effects, entailing a reduction in or withdrawal of steroids.

In my hospital, integration of materia medica with a steroid regime is based on:

- Enhancing the effects of the original dose of steroids through the use of materia medica.
- Treating specific symptoms such as proteinuria, thrombocytopenia, or facial erythema with materia medica and acupuncture.
- Minimising the side effects of steroids, such as osteoporosis, hyperlipidemia and immune function deficiency (increased susceptibility to infections), with materia medica and acupuncture.
- Gradually replacing steroids with materia medica.

Steroids act rapidly, within several hours, whereas materia medica and acupuncture are much slower to act. For the majority of

patients, materia medica taken for a short period will not prevent a rebound effect when steroids are stopped. Therefore for SLE patients who have recently started treatment with materia medica, steroids should not be reduced or withdrawn immediately. In my hospital, steroids have been successfully reduced or withdrawn using materia medica that patients have continued to take over three to five years or even longer to maintain stability of the condition.⁵

Integrating Chinese and Western medicine is also very effective in treating the various symptoms of SLE in more serious cases. I have found this combination to be particularly useful for treating joint and muscle pain and inflammation, erythema and other skin lesions, fever (once the initial stage of high fever has been brought under control) and proteinuria, and for decreasing susceptibility to infections.

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Endnotes

1 A review was carried out of the case histories of 142 SLE in-patients treated in my hospital between 1987 and 1993. In total, 86 cases (61 per cent) exhibited a pattern of internal Heat due to *yin* deficiency, 6 cases (4 per cent) Spleen and Kidney deficiency, 9 cases (6 per cent) *qi* and *yin* deficiency, 29 cases (20 per cent) exuberant Heat in the *qi* and *yin* levels, and 12 cases (9 per cent) stasis-Heat and accumulation of Retained Fluids. This indicated that 101 of the 142 cases (79 per cent) could be attributed to a deficiency pattern.

When symptoms such as high fever, oedema and vasculitis subside in patterns of exuberant Heat in the *qi* and *yin* levels or stasis-Heat and accumulation of Retained Fluids, the disease changes from the acute to the chronic stage, with its clinical manifestations transforming into those of a pattern of internal Heat due to *yin* deficiency. Therefore, all chronic cases are a deficiency pattern, with *yin* deficiency accounting for the majority (around 90%) and *qi* and *yin* deficiency and Spleen and Kidney deficiency accounting for the remainder.

Looking at the cases from a different perspective, 127 (89 per cent) were related to Fire, 86 to deficiency Fire and 41 to excess Fire. As the disease moves from the acute to the chronic stage, so Fire will change from excess to deficiency.

2 Details of recent research into biomedical properties of various materia medica can be found in Shen Pi'an (2006). *Zhong Yao Yao Li Yu Lin Chuang Ying Yong (Pharmacology and Clinical Application of Chinese Materia Medica)*. Beijing: People's Medical Publishing House.

3 These include *gui jian yu* (Euonymi Lignum Suberalatum), *huai hua* (Sophorae Japonicae Flos), *ou jie* (Nuciferae Rhizomatis Nodus), *luo de da* (Centellae Herba), and *jie gu mu* (Sambuci Williamsii Ramulus).

4 Luo Yongzhen (2002). *Zhen Jiu Yu Mian Yi (Acupuncture and Immunology)*. Beijing: People's Medical Publishing House: 394.

5 An extensive discussion of the role of Chinese medicine in managing the main adverse effects of the prolonged use of corticosteroid and immunosuppressive therapy can be found in Shen Pi'an (2012). *Shen's Textbook on the Management of Autoimmune Diseases with Chinese Medicine*. Barnet: Donica Publishing: 84-100.

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