



SUN TEN

July/August 2005

NEWSLETTER

研究 安全

中医 Traditional Chinese Medicine



New Uses of Ancient Formulae: *Gui Zhi Tang* [Cinnamon Combination]

Traditional Chinese Medicine (TCM) is based on pattern differentiation, not disease differentiation. However, due to “ready made” pattern differentiations in textbooks, we might potentially create our own TCM-version of limitations: When treating a certain disorder, are our minds open for any possible pattern the patient might present, or are we “pre-programmed” towards the patterns commonly associated with that disorder?

A number of Chinese publications have a column entitled “New Uses of Ancient Formulae”. The following abstracts may inspire a new approach in difficult to treat cases.

1) Cervical Spondylosis, female 47 years old:

During the first consultation the patient describes her situation as neck stiffness for more than three months, with accompanying numbness in the right upper arm. As a teacher this creates problems writing on the blackboard during class. Other symptoms are headache, dizziness, tendency to sweat easily and frequent colds. Pale tongue with thin white coating, pulse is fine and moderate. A recent x-ray revealed hyperosteoegeny at the fifth and sixth cervical vertebrae. She was given *Gui Zhi Jia Ge Gen Tang* [Cinnamon Combination adding Pueraria] with other additions.

The dosages were *Gui Zhi* [Cinnamon Twigs] 9 g, *Bai Shao* [White Peony], *Chi Shao* [Red Peony] 12 g each, *Ge Gen* [Pueraria], *Huang Qi* [Astragalus] 15 g each, *Qin Jiao* [Gentiana Macrophy], *Jiang Huang* [Turmeric] 10 g each, *Sheng Jiang* [Fresh Ginger] 3 slices, *Da Zao* [Jujube] 5 pieces, *Zhi Gan Cao* [Baked Licorice] 5 g.

CONTENTS

中医

Traditional Chinese Medicine

- 1 New Uses of Ancient Formulae: *Gui Zhi Tang* (Cinnamon Combination)

中医基础

TCM Principles

- 4 TCM Paediatric Physiology, Pathology and Treatment

中西医结合

Integrated Traditional and Western Medicine

- 7 Effectiveness Of Four TCM Herbal Extracts In The Treatment Of Atopic Dermatitis.

One week later, the patient reported that her neck felt more supple, but there was still numbness in the right upper arm. Her limbs felt weak, and tongue and pulse did not show any significant changes. The original prescription was modified with *Dang Gui* [Angelica Sinensis] 15 g, and *Huang Qi* [Astragalus] was increased to 30 g. After taking seven doses, the neck had become even more flexible, the limbs did not feel weak and the numbness had decreased. There was no significant change in the accompanying symptoms. The patient continued to take 20 doses of the second prescription after which all symptoms disappeared.

Comment: Cervical spondylosis often manifests as neck stiffness and pain, and the location of the disorder is on the Tai Yang channel. The disorder arises when cold evil causes unsmooth flow of channel Qi. *Gui Zhi Tang* is used to resolve the flesh, *Ge Gen* [Pueraria] is added to dissipate evil, in accordance with clause 14 in the Shang Han Lun “Tai Yang Syndrome: If the patient feels stiff in the back and neck, perspires and has aversion to wind, *Gui Zhi Jia Ge Gen Tang* is indicated.” On the basis of *Gui Zhi Jia Ge Gen Tang*, *Huang Qi* [Astragalus], *Jiang Huang* [Turmeric], *Qin Jiao* [Gentiana Macroph] etc. are added to the formulae.



White Peony and Cinnamon



Hoelen and Jujube

Apart from having Yin-enriching and Yang-nourishing properties, these herbs increase the effect of boosting Qi, quickening the network vessels and engendering liquid. After it was apparent that the prescription yielded results, medicinals were modified according to the patient’s condition: The dose of *Huang Qi* [Astragalus] was increased and *Dang Gui* [Angelica Sinensis] was added to obtain an additional Qi-boosting, blood-nourishing and blood-quickening effect.

2) Urticaria (hives), male 30 years old:

Patient recalls that 10 years ago when he was a university student his body started itching after sports and sweating, and hives spread all over his body. In the beginning, the symptoms were light and he did not pay much attention to his condition. Later on, red marks appeared when he was scratching. Moreover, urticaria the size of coins appeared now when he was exposed to wind and cold. In the beginning, treatment with

anti-allergic agents yielded results, but in the end the symptoms became worse, so he was prescribed Chinese herbs. The herbs used were predominantly dispelling wind, nourishing blood and quickening blood. The results however were not good enough, leaving the patient with hives spread all over his body, itchiness, and a slight red face, accompanied by thirst, moist tongue with thin white coating, and a string-like and slightly moderate pulse. On the basis of his symptoms, the principle of harmonising construction and defense to assist coursing wind was applied, and *Gui Zhi Tang* [Cinnamon Combination] was chosen as the representative formula.

The dosages were *Gui Zhi* [Cinnamon Twigs] 10 g, *Bai Shao* [White Peony] 12 g, *Zhi Gan Cao* [Baked Licorice] 6 g, *Sang Pi* [Morus] 15 g, *Di Fu Zi* [Kochia] 10 g, *Sheng Jiang* [Fresh Ginger] 3 slices, *Da Zao* [Jujube] 5 pieces. The patient was advised if, after taking one dose, he felt the prescription was effective, to boil the same herbs again yielding approximately 500 ml of water and to wash with this second decoction. After one week the patient reported that the itching had almost completely subsided,

and the urticaria had disappeared after the first external application. The tongue coating was thin and white, the pulse was moderate. The patient was advised to take another seven doses to establish the effect. To date the urticaria has not reappeared.

Comment: Because urticaria often arises due to blood depletion, one tends to consider the treatment principle “dispel wind and nourish blood”. However, in clinical reality quite a few cases of urticaria are due to wind-cold and resulting construction defense disharmony.

Gui Zhi Tang [Cinnamon Combination] harmonises construction and defense, and warms and frees the vessels. It resolves the flesh, effuses the exterior and treats itching due to wind-cold stagnating in the exterior with construction-defense disharmony. Using Kochia and Morus as assistant medicinals dispels wind.

3) Paediatric Acute Gastroenteritis, female 12 years old:

Mother describes young girl as having a weak constitution and rarely eating raw or cold foods. However, due to the extremely hot summer weather, she had eaten three ice-creams and drunk ice-cold water the day before. During the night, she then experienced abdominal pain, diarrhoea, weakness, aversion to cold and cold body, moderate pulse, a pale tongue and moist tongue fur. Cinnamon Combination with additions was prescribed.

The dosages were *Gui Zhi* [Cinnamon Twigs], *Bai Shao* [White Peony] 6 g each, *Zhi Gan Cao* [Baked Licorice] 5 g, *Bai Zhu* [Atractylodes (white)] 10 g, *Fu Ling* [Hoelen] 15 g, *Shen Qu* [Massa Fermentu] 9 g, *Sheng Jiang* [Fresh Ginger] 3 slices, *Da Zao* [Jujube] 5 pieces.

According to the classical method of taking this formula, take as a decoction followed by a bowl of hot rice gruel. After taking one dose the diarrhoea improved significantly, and the abdominal pain disappeared. After two doses the patient fully recovered.

Comment: The gastroenteritis was set off by the combination of summer heat with ingestion of cold food and drink. Often, *Huo Xiang Zheng Qi San* [Agastache Formula] is used to treat this type of gastroenteritis, however, the child in question was of weak constitution, and using *Huo Xiang Zheng Qi San* could dissipate the exterior too much, hence Cinnamon Combination was used to dissipate while regulating and harmonising the centre.



Licorice

Gui Zhi [Cinnamon Twigs] combined with *Gan Cao* [Licorice] warms and nourishes spleen and stomach Yang, *Shao Yao* [White Peony] and *Gan Cao* [Licorice] harmonises the spleen, relaxes tension and relieves pain, *Jiang* [Ginger] and *Zao* [Jujube] combined reinforce the action of harmonising construction and defense. On this basis, the addition of *Bai Zhu* [Atractylodes (white)], *Fu Ling* [Hoelen] and *Shen Qu* [Massa Fermentu] produces a formula that fortifies spleen and stomach, harmonises construction and defense, warms the interior and dissipates cold in the exterior, thus being effective in treating acute gastroenteritis.

Summary

Gui Zhi Tang [Cinnamon Combination] is made up of *Gui Zhi* [Cinnamon Twigs], *Bai Shao* [White Peony],

Gan Cao [Licorice], *Sheng Jiang* [Fresh Ginger], *Da Zao* [Jujube]. Its functions are well balanced, being able to enrich Yin and harmonise Yang, harmonise construction and defense, resolve the flesh and promote sweat. Due to these balanced actions of Yin within Yang, softness within hardness (in treatment method), supplementation within attack, and contraction within effusion, the formula's clinical application is wide. The two main applications of Cinnamon Combination are harmonising construction and defense, and fortifying and moving the spleen and stomach. In clinical practice, one can harmonise construction and defense in every patient whose disease is located in the exterior in order to treat his exterior. In patients whose disease is located in the interior, one can fortify and move the spleen and stomach to harmonise the patient's interior. Therefore, *Gui Zhi Tang* [Cinnamon Combination] can be applied in all cases with disharmony of construction and defense, insufficiency of Qi and blood, tight sinews and disharmonies of the muscles and flesh, and evil Qi entering the spleen and stomach.

“The two main applications of Cinnamon Combination are harmonising construction and defense, and fortifying and moving the spleen and stomach”

Research Brief

***Shao Yao Gan Cao Tang* [Peony & Licorice Combination] Effectively Treats Frequent and Severe Muscle Cramps**

1 Hinoshita F, et al. Effect of orally administered Shao-Yao-Gan-Cao-Tang on muscle cramps in maintenance hemodialysis patients: A preliminary study. Am J Chin Med. 2003;31(3):445-53

Shao Yao Gan Cao Tang [Peony & Licorice Combination] has traditionally been used for pain, especially pain due to muscle spasm involving liver Yin vacuity. To determine whether this medicine is able to prevent frequent and unendurable muscle cramps in patients undergoing hemodialysis, *Shao Yao Gan Cao Tang* at 6 g per day was administered for four weeks to hemodialysis patients who were suffering from frequent muscle cramps. Skeletal muscle cramps either completely disappeared or the frequency and severity of cramping was significantly decreased. No serious side-effects were detected during the treatment period. The inhibitory effect of *Shao Yao Gan Cao Tang* on muscle contraction was also experimentally examined in rats, demonstrating that extracts of peony and licorice roots inhibit contraction of skeletal muscles in rats. Overall the results suggest that administration of *Shao Yao Gan Cao Tang* is a safe and effective treatment for addressing muscle cramps.

中医基础 TCM Principles

Articles appearing under the heading "TCM Principles" are suitable for graduates of the **Sun Ten Self Study Course** and carry footnotes referring to content explained in the course. The articles are ideal to review your studies and further your knowledge in a particular area of TCM.

TCM Paediatric Physiology, Pathology and Treatment

By Dagmar Riley

TCM with its pattern differentiation has proven to be a highly flexible and effective system of diagnosis and treatment in a wide array of clinical scenarios, but I am especially enthusiastic about its use in paediatrics. Most disorders in children are not complicated by years of untreated chronic illnesses that have evolved into complex multiple patterns; moreover, most children's disorders have a common root: The spleen.



"Children under school-age tend to have a weak spleen, meaning that the spleen's function of 'governing movement and transformation' has not yet fully matured"

Young Children Tend To Have A Weak Spleen

Children under school-age tend to have a weak spleen, meaning that the spleen's function of "governing movement and transformation" has not yet fully matured. "Movement and transformation" means extracting the nutrients from food and moving the extracted essence to relevant parts of the body. In this sense, the spleen participates in the formation of Qi and blood. If this function is strong, the child enjoys good appetite and digestion, regular bowel movements and good absorption of nutrients. The spleen also governs the movement and transformation of fluids, and an impairment of this function will cause the formation of dampness.

Examples of a weak spleen function are: Bad appetite and digestion, nutritional disorders, internal dampness which can manifest as excess mucus/drooling, weak limbs and lack of physical energy.

The importance of digestive health in children becomes even more crucial if the relationship between the spleen and the lungs is examined.

Earth (Spleen) Engenders Metal (Lungs)

The spleen has an engendering and nurturing effect on the lungs: The Qi the spleen extracts from food is transported to the lungs, and the lungs spread Qi throughout the body. This function plays an important part in the body's immunity to external pathogenic factors. If Qi is well distributed under the skin it protects the body from an invasion of external pathogenic factors. As children tend to have a weak spleen, the lung often does not receive sufficient Qi from the spleen to spread throughout the body to protect it from external evils. Thus, another feature of child pathology is:

The lung is often in insufficiency.

Colds and coughs are common in children for this reason.



If the spleen is weakened even further, e.g. through improper nutrition, spleen Qi becomes more depleted and the spleen's functions of movement and transformation of body fluids can be impaired. This tends to result in phlegm formation which obstructs and weakens the lungs. Lingering colds, chronic coughs, bronchitis, asthma, middle ear infections, allergies, eczema (the

lung is related to the skin), and of course poor appetite, diarrhoea, abdominal pain, colic, reflux and vomiting. All these could be prevented or treated effectively by strengthening the spleen and as a result reinforcing the lung and its function to protect the body from external evils.

“Healthy and ‘spleen-friendly’ nutrition is important to strengthen the spleen and by doing so prevent or effectively treat many common childhood disorders.”

Strengthening The Spleen With The Right Nutrition

As babies and small children tend to have a weak spleen, healthy and “spleen-friendly” nutrition is important to strengthen the spleen and by doing so prevent or effectively treat many common childhood disorders. The introduction of solids in a baby’s diet is an important stage that can aggravate existing conditions, or be the beginning of other disorders if handled incorrectly e.g:

- the baby is overfed;
- the solids are introduced too early, e.g. before the recommended age of six months or before the baby gives signs that it is ready for solids;
- the wrong type of solids are introduced too early or the variety increased too quickly;
- if dampness-engendering foods are given.

Food is classified as dampness-engendering if its temperature is too cold (for babies this is less than body temperature), sugary, or if its quality is cooling or dampness-engendering. As a general guideline, foods to avoid with small children are:

- Foods colder than room-temperature (for babies foods colder than body-temperature);
- Sweets, especially ice cream;
- Commercial fruit juices;
- Processed foods;
- Excessive amounts of cheese or cold milk.

The best nutrition is regular, cooked meals with fresh ingredients. Annabel Karmel’s “New Complete Baby and Toddler Meal Planner” provides good examples of healthy cooked baby and toddler meals that are delicious and for the most part in line with TCM nutritional recommendations.

Many common childhood illnesses can be prevented if children are fed according to the common-sense guidelines: A regular light, easily digestible diet of fresh cooked meals, and no overfeeding.

Common Patterns And Suitable Formulae

Spleen and Stomach Qi Vacuity (Weak Digestive System)

Poor appetite, pale complexion, cold hands and feet, easily fatigued, spontaneous sweating, loose stools or diarrhoea mixed with undigested food. Babies and toddlers may display a blue vein at the root of the nose between the eyes. Tongue: Pale with a thin white coating.

Shen Ling Bai Zhu Tang [Ginseng & Atractylodes Formula]

Traditional Indication: Qi vacuity of spleen and stomach with severe damp.

Malnutrition in infants (underweight, poor eaters), indigestion, chronic diarrhoea, anaemia (due to malabsorption), tendency towards recurrent mucus congestion (lung, throat, sinus, glue ear).

This formula treats spleen Qi vacuity leading to dampness, often generated by overfeeding or feeding of damp-generating foods.

Contraindication: Severe dryness or Yin vacuity (e.g. dry hacking cough).

Xiao Jian Zhong Tang [Minor Cinnamon & Peony Combination]

This formula relieves spasms and stops pain, warms the spleen and stomach, and supplements vacuity. It is indicated in cold type abdominal pain (usually a history of eating many cold or raw foods), cold-type infantile colic and poor appetite in children with pale complexion, low energy, cold hands and feet, and a pale tongue.

Minor Cinnamon & Peony Combination is made up from Cinnamon Combination as a base formula, adding



“Many common childhood illnesses can be prevented if children are fed according to the common-sense guidelines: A regular light, easily digestible diet of fresh cooked meals, and no overfeeding.”

Yi Tang [Maltose] and increasing the quantity of *Bai Shao* [White Peony]. *Yi Tang* [Maltose] supplements the spleen and stomach. *Bai Shao* [Peony] has different functions: Together with *Gui Zhi* [Cinnamon] it harmonises construction and defense Qi, together with *Gan Cao* [Licorice] it has an analgesic effect and relieves spasmodic pain.

The base formula Cinnamon Combination is a pungent warming and exterior resolving formula, at the same time it regulates and harmonises construction and defense Qi. This is why the treatment scope of Minor Cinnamon & Peony Combination includes common colds in infants where there is very little fever or inflammation. For more information on Cinnamon Combination and pediatrics see the “Pediatric Acute Gastroenteritis” section in the article “New Uses of Ancient Formulas: *Gui Zhi Tang* [Cinnamon Combination]” in this newsletter.

Both Ginseng & Atractylodes Formula and Minor Cinnamon & Peony Combination strengthen the spleen. The main difference between Ginseng & Atractylodes Formula and Minor Cinnamon & Peony Combination is that the emphasis of the former is on transforming dampness, whereas the latter deals more with internal cold and pain.

Food Stagnation

Food stagnation is a repletion pattern that develops from a spleen vacuity pattern. An impaired spleen function of movement and transformation of nutrients can result in food stagnating in the stomach. As children tend to have a Yang constitution (which is particularly pronounced during growth spurts and teething), stagnation is likely to transform into depressive heat.

Symptoms and Signs include: Bad breath, warm hands and feet, tendency towards constipation, hyperactivity.

Xiang Sha Liu Jun Zi Tang [Saussurea & Cardamon Combination]

Traditional Indication: Spleen Qi vacuity, phlegm damp, Qi stagnation. *Xiang Sha Liu Jun Zi Tang* [Saussurea & Cardamon Combination] consists of *Si Jun Zi Tang* (a basic Qi tonic) plus *Chen Pi* [Citrus], *Ban Xia* [Pinellia], *Mu Xiang* [Saussurea], *Sha Ren* [Cardamon]. Apart from supplementing Qi and strengthening the spleen (*Si Jun Zi Tang*), *Xiang Sha Liu Jun Zi Tang* also transforms phlegm and moves Qi. *Mu Xiang* [Saussurea] regulates Qi and is often added to promote digestion. It strengthens the spleen, prevents stagnation and regulates stagnant Qi in the intestines. *Sha Ren* [Cardamon] is an aromatic herb used in cases of Qi stagnation due to dampness or food stagnation.

Contraindication: Severe dryness or Yin vacuity (e.g. dry hacking cough).

Dual Exterior-Interior Pattern

Children often suffer from exterior patterns due to a weakened spleen and lung. These exterior evils often linger in the body, causing further stagnation and heat.

Xiao Chai Hu Tang [Minor Bupleurum Combination]

Minor Bupleurum Combination harmonises and resolves half exterior half interior pattern (midstage pattern), resolves exterior heat, soothes the liver and resolves depression, supplements Qi and strengthens the spleen, harmonises the stomach and stops vomiting. *Chai Hu* [Bupleurum] expels exterior pathogens. *Huang Qin* [Scute] clears fire. *Ban Xia* [Pinellia] harmonises the stomach and downbears rebellious Qi. *Ren Shen* [Ginseng], *Da Zao* [Jujube], *Gan Cao* [Licorice] and *Sheng Jiang* [Ginger] benefit stomach Qi and engender fluids, harmonise construction and defense Qi, support right Qi and help dispel evil.

Due to its dual action of dispelling evil Qi and supporting right Qi, prophylactic administration of Minor Bupleurum Combination over the autumn and winter months is very effective in children with recurrent infections. During the acute stage, Minor Bupleurum Combination should be taken with a formula addressing the particular infection. Also, bear in mind that a good spleen-strengthening diet is the best prophylaxis. Minor Bupleurum

Combination is also used effectively in the treatment of middle ear infections.

How Do Children Take Chinese Herbs?

Babies: Granulated Chinese herbs dissolve very well in baby formula, and babies usually don't mind the taste. Alternatively, dissolve granules in warm water and squirt into mouth with a dropper.

Small children: Granules can be dissolved in anything that works: Dissolve granules in hot water and add honey. Alternatively add granules to a tip of a teaspoon of stevia powder, or add to small amount of porridge, cooked apple, etc.

Dosage: The dosage for school-age children is stated on the bottle, for smaller children please phone the Sun Ten technical support on 1800 777 648.

For a more detailed discussion of common childhood disorders, please see the paediatric section of the “Chinese Herbal Medicine Practitioner Manual” available from customer service, please phone 1800 777 648.



中西医结合 Integrated Traditional and Western Medicine

Effectiveness Of Four TCM Herbal Extracts In The Treatment Of Atopic Dermatitis

The research in this article was originally published under the title "Kampo Medicines for Mite Antigen-Induced Allergic Dermatitis in NC/Nga Mice" by Xiu Kun Gao, Kazutoshi Fuseda, Tomonori Shibata, Hiroyuki Tanaka, Naoki Inagaki and Hiroichi Nagai*, Department of Pharmacology, Gifu Pharmaceutical University Gifu, Japan, originally published by Oxford University Press in eCAM 2005 2(2):191-199; doi:10.1093/ecam/neh077

In order to determine the usefulness of four TCM formulae in the treatment of atopic dermatitis, the authors examined the effects of *Shi Quan Da Bu Tang* [Ginseng & Dang Gui 10 Combination], *Bu Zhong Yi Qi Tang* [Ginseng & Astragalus Combination], *Xiao Feng San* [Tang-kuei & Arctium Formula] and *Huang Lian Jie Du Tang* [Coptis & Scute Combination] on mite antigen-induced dermatitis in mice.

"The causes of immune dysfunction create an imbalance in the ratio of Th1/Th2 cells rather like a see-saw out of balance"

Atopic Dermatitis

Atopic dermatitis is a chronic, severely itching skin disorder. In most cases, onset of the disease is observed in infancy and is considered to be dependent on both genetic and environmental factors. Elevated serum IgE levels are a characteristic feature in many patients. Itchiness is the most important problem for atopic dermatitis patients and scratching worsens the dermatitis itself.

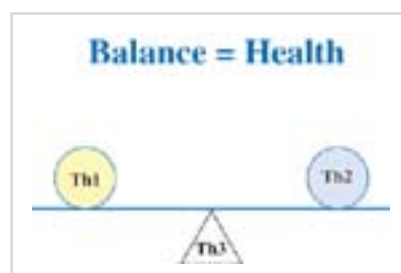
Topical glucocorticoids, (e.g. prednisolone), have potent anti-inflammatory properties and are often used in the treatment of atopic dermatitis.

Side-effects, such as thinning of skin, dilated blood vessels, stretch marks, and loss of anti-inflammation effectiveness, tend to occur when high-potency corticosteroids are used over long periods of time. Recently, tacrolimus, an immunosuppressant, has been introduced to treat atopic dermatitis, but it is less effective than glucocorticoids.

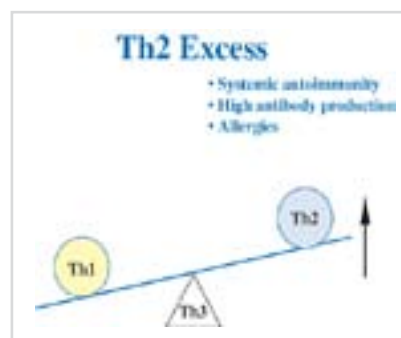
Role of T-helper Cells

Eczema is associated with a T-helper 2 (Th2) excess state. T-helper cells are the principal regulatory cells

of the immune system. There are three main types of T-helper (Th) cells, Th1, Th2 and Th3. Th1 cells regulate the body's defense against bacteria, viruses and fungi, and are largely responsible for attacking and killing tumor cells. Th2 cells promote the production of antibodies against foreign matter (allergens, parasites) in the bloodstream. Th3 cells provide immune control through regulating excess Th1/Th2 activity.



These T-helper cells regulate themselves by having an opposing effect. Whenever there is an excessive activity of one T-helper type, this causes suppression of the other. In this way it can be imagined that the immune system is regulated in a see-saw manner.



The causes of immune dysfunction create an imbalance in the ratio of Th1/Th2 cells rather like a see-saw out of balance. As mentioned, eczema is associated with a Th2 excess state. If the see-saw can be brought back into balance this can achieve marked improvements in the disorder.

Research Methods

The allergic dermatitis model in NC/NGA mice was established by repeated local exposure of mite antigen. The dermatitis possesses some characteristic features observed in atopic dermatitis patients, such as eczematous skin lesion with inflammatory cell accumulation, a Th1/Th2 balance skewed to Th2 and elevated serum IgE levels. The Th1/Th2 imbalance has been considered to be an important feature of atopic dermatitis.

Dried extracts of *Shi Quan Da Bu Tang* [Ginseng & Dang Gui 10 Combination], *Bu Zhong Yi Qi Tang* [Ginseng & Astragalus Combination], *Xiao Feng San* [Tang-kuei & Arctium Formula] and *Huang Lian Jie Du Tang* [Coptis & Scute Combination] were provided. The quality of the extracts was checked by examining the quantity of key compounds using HPLC. The HPLC profile of *Shi Quan Da Bu Tang* [Ginseng & Dang Gui 10 Combination] is indicated in Figure 1 as an example.

Shi Quan Da Bu Tang [Ginseng & Dang Gui 10 Combination] and *Bu Zhong Yi Qi Tang* [Ginseng & Astragalus Combination] are typical prescriptions used to aid recovery from an exhausted or weakened condition. The TCM functions of *Shi Quan Da Bu Tang* are supplementing blood and Qi, warming Yang and expelling cold. *Bu Zhong Yi Qi Tang* traditionally supplements Qi and strengthens the spleen, aids the ascending of pure Yang and lifts prolapse. The traditional functions of *Xiao Feng San* [Tang-kuei & Arctium Formula] are to clear heat, cool blood, dispel wind and eliminate itching. *Huang Lian Jie Du Tang* [Coptis & Scute Combination] is prescribed to clear heat (including fever) and drain fire, transform damp and stop bleeding. Some of the herbs involved in these prescriptions, such as *Gan Cao* [Licorice], *Dang Gui* [Angelica Sinensis], *Chai Hu* [Bupleurum], *Huang Qin* [Scute] and *Huang Lian* [Coptis] or their constituents have previously been reported to exhibit modulating activities on inflammation and immunity.

Results

All formulae were able to inhibit mite antigen-induced allergic dermatitis in mice and correct the Th2 excess state. The ability of the Kampo medicines to correct the Th1/Th2 balance seems to underlie their effectiveness in the treatment of atopic dermatitis. The results obtained

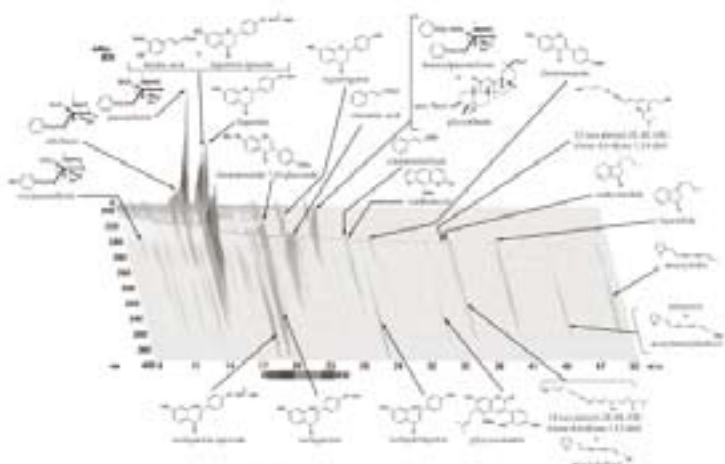


Figure 1. HPLC profile of *Shi Quan Da Bu Tang* [Ginseng & Dang Gui 10 Combination]

were comparable to prednisolone. (See Figure 2)

Elevated serum IgE levels are a characteristic feature in many patients. *Shi Quan Da Bu Tang* [Ginseng & Dang Gui 10 Combination] and *Bu Zhong Yi Qi Tang* [Ginseng & Astragalus Combination] prevented the elevation of serum IgE level.

In 1999, Iijima et al. reported that *Shi Quan Da Bu Tang* [Ginseng & Dang Gui 10 Combination] and its component, Hoelen, shift the Th1/Th2 balance toward the Th1 dominant state. Furthermore, Matsumoto and Yamada examined the influence of oral administration of *Shi Quan Da Bu Tang* [Ginseng & Dang Gui 10 Combination] on the concanavalin A-stimulated cytokine production in mouse lymphocytes and reported that the ratio of produced Interferon- γ (IFN- γ) and Interleukin-4 (IL-4) is shifted to Th1 dominant. These reports suggest that *Shi Quan Da Bu Tang* can modulate the Th1/Th2 balance and support the present results. *Bu Zhong Yi Qi Tang* [Ginseng & Astragalus Combination] has also been reported to regulate the Th1/Th2 balance in sensitised mice. *Bu Zhong Yi Qi Tang* inhibits IgE production as well as IL-4 production, but enhances IFN- γ production. Furthermore, not only IgE production but also spontaneous dermatitis in mice was inhibited by *Bu Zhong Yi Qi Tang*.

Conclusion

All four TCM formulae inhibit dermatitis and the associated inflammatory changes and correct the Th2 excess state in mite antigen-treated NC/NGA mice. This information may prove useful in the process of choosing the most suitable formula when treating dermatitis on the basis of pattern differentiation.

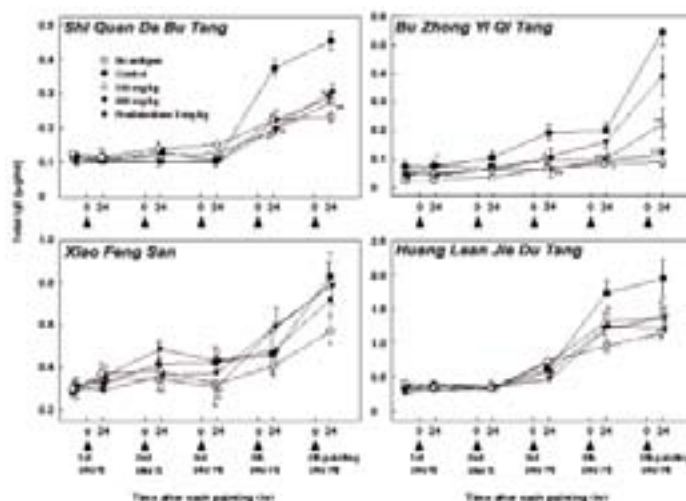


Figure 2.