

**Atopic Eczema: A Comparative Review of
Biomedical and TCM Treatment for Clinicians**

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Atopic Eczema: A General Introduction

Atopic eczema is an inflammatory skin disorder that is known by several names. In common parlance the general population usually uses the name *eczema*, while the official medical term is either *atopic eczema* (AE) or *atopic dermatitis* (AD). The word 'eczema' comes from the Greek word 'ekzein,' which means to 'boil out' (Plötz & Ring, 2010). This 'boiling out' refers to the cyclical flaring up of erythematic, pruritic, inflamed, possibly exudative skin lesions. 'Atopy' or 'atopic' also comes from the Greek, meaning 'out of place' and therefore describes a genetic hypersensitivity or hyper allergic state in which an individual reacts to stimulants or substances that the rest of the population is unaffected by (Farhi et al, 2010). Although there is not one, all-encompassing name for AE in the Chinese medical literature, there are many names that describe eczematous rashes (Hsu, 1994). Some of these descriptive names are: shi zhen, meaning 'damp rash', and si wen feng, translated as 'four bends wind,' due to the fact that lesions are often found at the antecubital and popliteal fossae (Zhenzhen, 2005).

Atopic eczema is a chronic inflammatory, pruritic skin condition that is non-contagious and runs in families. Sometimes it can be difficult to differentiate AE from other skin conditions, such as psoriasis and contact dermatitis. As defined by the British Journal of Dermatology in 1994, to make a diagnosis of AE, the patient must have itchy skin in addition to three of the following criteria:

- History of involvement of skin creases
- Personal history of asthma or hay fever (allergic rhinitis), or similar history in a first degree relative if the patient is under 4 years of age
- History of dry skin in the last year
- Visible flexural eczema (or eczema involving cheeks, forehead and outer aspects of limbs in children under 4 years of age
- Onset under age 2 (this final criterion not used in children under age 4) (Williams et al, 1994)

The distribution of lesions varies depending on the age of the patient. In infants and children, lesions are typically found on the scalp, face and extensor surfaces. Adults usually experience lesions on the flexor surfaces as well as on the neck, wrists and ankles (Plötz & Ring, 2010). Atopic eczema usually first occurs during infancy although it can occur for the first time later in life (Plötz & Ring, 2010). For most children with AE, symptoms will improve by five years of age and in most patients, AE will resolve completely by age 30. However, relapses can occur throughout life (Beers et al, 1999).

Researchers and clinicians have developed numerous assessment tools to measure the severity of atopic eczema in individuals. These clinical tools assess the severity of itching, redness, swelling, thickness, scratching and lichenification of eczematous skin lesions, as well as how much body area is affected and how the individual's quality of life is affected. The most widely used tools are the Eczema Area and Severity Index (EASI), Scoring Atopic Dermatitis (SCORAD), Dermatology Life Quality Index (DLQI) and Visual Analog Scale (VAS) to measure itch. See Appendix 1. It is important to be able to measure severity of symptoms for several reasons. First, medications will be prescribed depending on severity of disease; more potent medications are obviously reserved for more severe conditions. Second, it is essential to have a way to measure whether a medication is sufficiently effective for a patient.

Third, researchers must have a way to measure and track the disease during their clinical studies; examples of these clinical studies will be discussed at length later on.

It is somewhat difficult to measure prevalence of AE worldwide and to compare prevalence from country to country. Studies seem to show that there is a higher prevalence of AE in industrialized countries and a lower prevalence in agricultural countries. However, there is by no means any kind of strict divide between industrial and agricultural countries.

“The 1 year prevalence amongst two groups of children aged 6-7 years and 13-14 years varied widely throughout the world from 15-20% in the UK, Ethiopia, Nigeria, Finland, Sweden, Eire and New Zealand to very low levels of 1-2% in Albania, Iran, China and Indonesia” (Lewis-Jones, 2006).

There is evidence that prevalence of AE is increasing worldwide, as cited by Plötz & Ring (Plötz & Ring, 2010). Unfortunately, we do not have enough studies showing whether there is a difference in prevalence among specific ethnic or racial groups, whether climate is a factor and whether rural areas have different prevalence rates than cities. AE is much more common in children, with up to 20% of the children in some countries affected by the disease (Traidl-Hoffman, 2010). In the adult population the prevalence is only 1-2%, as most children outgrow their condition.

There is clearly a genetic component to AE; up to 70% of patients have a family history of the disease (Chamlin et al, 2005). Some evidence suggests that pollution and environment toxins are contributing to rising rates of AE (Ionescu, 2009), while other evidence seems to suggest that overly sterile environments are a factor (Plötz & Ring, 2010). Skin care also seems to play a role; factors such as hot water, drying soaps and exposure to cold air can aggravate AE symptoms (Warner & Camisa, 1998). It is also likely that topical irritants (wool, synthetics, soaps, detergents, chemicals), topical allergens (metals, latex, preservatives, perfume) and inhalant allergens (dust mites, cockroaches, pollen, mold and animal dander) contribute to the expression and severity of AE symptoms. Dietary factors may also play a role. Cow's milk, eggs, peanuts, tree nuts, wheat, soy, fish and shellfish are the most likely dietary triggers (Lewis-Jones & Mugglestone, 2007). A double-blind controlled trial (n=48) published in 1996 found that reducing exposure to housedust-mites significantly improved patients symptoms of allergic eczema. In this study the researchers used goretex bedcovers, a chemical spray, and a high-filtration vacuum cleaner over a period of six months in an effort to reduce the patients exposure to housedust-mites. The researchers found that while all three measures were helpful, the goretex bedcover was by far the most effective. (Tan, et al, 1996).

Children with AE in early childhood have been shown to be more likely to develop asthma and allergic rhinitis (hay fever) later in life. This is known as the 'atopic march' (Plötz & Ring, 2010). According to Plotz & Ring (2010), 50-80% of patients with AE either have or will go on to develop asthma or allergic rhinitis. AE related itching and discomfort can often disrupt sleep, which in turn causes daytime fatigue. Itching also seems to be worse at night for many patients. Adults and children with AE are also at risk for feelings of anxiety and depression due to the physical appearance of their lesions. Some patients report low self-confidence and inhibited social and intimate interactions due to shame and embarrassment about their physical appearance (Nilsson et al, 1999). In older children and adults, stress has been shown to

play a role in exacerbation of symptoms of AE, and AE in turn has been shown to hinder patients' ability to cope with stress (Traidl-Hoffman, 2010).

Another very important co-morbidity for AE is secondary microbial infection. *Staphylococcus aureus* is the most common concurrent infection seen in patients with AE, with some studies showing up to 90% colonization rate among AE patients (Schnopp et al, 2010). Other microbials that are seen concurrently with AE are streptococcus, candida albicans, pityrosporum yeasts and herpes simplex. These concurrent infections can exacerbate symptoms, leading to increased inflammation, redness, weeping and itching. In a recently published study, a group of researchers examined whether it would be possible to reduce the severity of symptoms in patients with AE by suppressing staphylococcus aureus growth through the use of simultaneous intranasal mupirocin treatment and dilute bleach baths. The results of this randomized, investigator-blinded, placebo-controlled study were that the active treatment group showed greater mean reduction in severity of AE symptoms (as measured by the EASI) than the placebo group (Huang et al, 2009).

The exact cause of AE is unknown at this time, but there are several key factors regarding the pathogenesis of this disease that are understood. Most commonly, AE is IgE-mediated (although it is non-IgE-mediated in 20-30% of cases), and seems to be linked to pro-allergic/pro-inflammatory T-cell immune response and impaired epidermal barrier function (Beers et al, 1999). Some experts believe that AE is solely a disease of the skin, whereas others believe that atopic eczema is systemic in nature; though symptoms manifest on the skin, the disease is not limited to the skin. Atopic eczema has also been shown to be inherently related to both asthma and allergic rhinitis (Plötz & Ring, 2010).

Prognosis can be very hard to predict. Most biomedical treatment aims to decrease severity of episodes with active lesions and to increase the length of time between outbreaks. The majority of children (60-70%) will outgrow their condition for the most part, but relapses can occur throughout life. There are certain factors that have been shown to indicate worse prognosis: family history of AE, early occurrence in infancy, female gender, and co-existing allergic rhinitis and asthma (Beers et al, 1999).

Biomedical Treatment

From a biomedical perspective, there are four basic components necessary for effective treatment of atopic eczema: reduction of inflammation, control of pruritis, strict skin care and patient education (Warner & Camisa, 1998).

Patients should be educated regarding the avoidance of the irritants, allergens and triggers listed above. Patients should also be instructed in the importance of strict skin care, including proper hydration of the skin and use of topical medications when necessary (Bone, 2003).

Strict skin care for the individual with AE will mean bathing for shorter duration with the water at a decreased temperature and avoiding the use of drying soaps. It will also be important to use some type of hydrating emollient several times a day, taking care to avoid emollients that contain lanolin, fragrances or other irritating substances (Bone, 2003). Some randomized controlled trials have shown that the use of emollients can reduce the need for more potent treatment, like corticosteroids (Plötz & Ring, 2010).

To reduce inflammation and to control pruritis, topical corticosteroids are usually the first type of medication used. Topical corticosteroids vary greatly in

potency and it is important to use the minimum potency necessary to generate effective relief. Topical corticosteroids provide a rapid anti-inflammatory effect and are best used to soothe acute flare-ups of AE. Long-term or continuous use of topical corticosteroids is not recommended, due to adverse effects, including: atrophy of the skin, stretch marks (striae), and spider veins (telangiectasia) (Plötz & Ring, 2010). However, as summarized by Farhi, et al (2010), a number of randomized controlled trials have shown that medium-term use (16 to 18 weeks) does not provoke clinically apparent atrophy (Farhi et al, 2010).

Topical calcineurin inhibitors (TCIs), such as tacrolimus and pimecrolimus have been developed in the last ten years and are now frequently used in the treatment of AE, especially in sensitive areas, like the eyelids and genitals, as TCIs do not lead to skin atrophy (Plötz & Ring, 2010). Topical calcineurin inhibitors do not have the local and systemic side-effects that topical corticosteroids do, but they may cause pruritis, stinging and warmth sensation at the application site initially. Furthermore, patients should take care to avoid prolonged sun and UV exposure while they are using TCIs (Traidl-Hoffman et al, 2010).

Phototherapy and tar preparations can also be used to reduce inflammation, but they have disadvantages as well. Tar preparations have an odor and a dark staining color (Plötz & Ring, 2010), and with phototherapy, eczematous lesions often come back more severely after an initial period of remission (H. Jin, personal communication, May 3, 2010). Furthermore, there is always a long term risk for the development of skin cancer with any UV treatments, and phototherapy especially (Traidl-Hoffman et al, 2010).

Antihistamines have been traditionally used during acute eczematous flares to control itching, but the evidence seems to suggest that their primary benefit is the sedative effect, which can be especially helpful when sleep is a problem due to intense pruritis (Plötz & Ring, 2010).

Anti-bacterial and antimycotic therapy may be necessary if there are concurrent infections as discussed above. However, it may be impossible to completely eradicate these skin infections, and long-term use of antibiotics can lead to antibiotic resistance, so this therapy has to be very well thought-out and well managed (Plötz & Ring, 2010).

In severe cases of AE in which all other conventional therapies have failed to work, systemic immunosuppressive therapies may be used, including: prednisone, cyclosporine A, antimetabolites and azathioprine. These treatments have potentially serious side effects and patients must be carefully monitored during treatment. These medications are usually used as a short-term solution when a patient has severe atopic eczema that is not responding to conventional therapies (Plötz & Ring, 2010).

Current research is looking into the development of medications that could work to influence the inflammatory pathways that are involved in AE. The goal is to find a more targeted and less toxic therapeutic approach for the treatment of AE (Plötz & Ring, 2010). Promising research has been done in recent years and there is hope that as this disease comes to be better understood, more effective treatment will be available.

Nutritional Treatment

From a nutritional standpoint, there is some evidence that supplementation of certain vitamins, minerals and essential fatty acids can have a therapeutic effect on symptoms of AE. Nutrients that may be beneficial are: selenium, zinc, EPA, and GLA (Werbach, 2003). There is also a popular hypothesis that supplementation of probiotics could reduce the incidence of atopic disease. Studies to date have not found evidence that is consistent enough to lead to general recommendation of probiotics in clinical practice, but some studies have shown highly positive results and it is clear that more research on this topic is important (Kalliomäki et al, 2010).

TCM Treatment

From a TCM perspective, at the root level atopic eczema is caused by a constitutional Lung and Spleen deficiency which is aggravated by external invasion of wind, dampness, heat, and environmental “toxins,” like dust mites and grass pollen (Yihou, 2004, p.104). The constitutionally deficient Spleen can easily be impaired by the consumption of heavy, greasy, fried, sweet or spicy foods during pregnancy. Fish and seafood may damage the Spleen as well (Yihou, 2004, p.104). The consumption of these foods during pregnancy and/or lactation can lead to the generation of damp-heat in the interior of an infant. This interior damp-heat can also arise in the child or adult who consumes those previously mentioned foods. This damp-heat can then move to the skin and flesh, causing the typical symptoms of AE (itching, redness, etc). Over time, the obstruction of the skin and flesh by exterior wind-damp-heat and/or internal damp-heat will damage the yin and body fluids, eventually leading to yin deficiency, blood dryness and wind dryness (Yihou, 2004, p.104). Congenital Lung deficiency can cause a deficiency of Wei Qi, which makes it easier for external pathogenic factors to invade.

Specific patterns are usually found to correspond with specific phases of life. From a TCM perspective, pattern differentiation can be divided into three phases of life: infantile (1 month to 2 years), childhood (3 to 12 years), and adolescent/adult (13 years of age and older) (Yihou, 2004, p.103). In addition to certain patterns being most often associated with certain phases of life, AE can also be defined by one of three stages: acute, subacute and chronic. These are three stages of inflammation and AE may start at any one of these stages and evolve into another. Acute lesions are extremely itchy and bright red with papules or vesicles that may ooze exudate and form crusts. Chronic lesions are scaly, red and dry with possible lichenification. Subacute lesions are somewhere in between acute and chronic (Chen, 2007).

The majority of eczema cases first manifest between 1-3 months of age. Infantile eczema typically presents on the cheeks, forehead and scalp. Rarely, the lesions may spread to other parts of the body. Lesions will vary depending on the baby’s constitution. Chubbier babies who sweat easily will tend to have exudative-type lesions. These lesions will be densely distributed with significant erythema and papules, papulovesicles and vesicles with exudation and yellow crusting: this is a damp-heat condition (Yihou, 2004, p.104).

Infantile Damp-Heat Pattern

(Yihou, 2004) and (Shen, 1996) unless otherwise noted
Please see Appendix 2 for Herbal Formula Ingredients



Infantile atopic eczema, damp-heat pattern

<http://dermnetnz.info/dermatitis/atopic-imgs.html>

- Dermatological Symptoms:** Densely distributed lesions with significant erythema and papules, papulovesicles and vesicles with exudation and yellow crusting.
- Other Symptoms:** Appears well nourished, constipation, scanty yellow urine
- Tongue:** Pale red body with a thin, yellow coat
- Pulse:** Slippery and rapid
- Internal Herbal Treatment:**
 - Xie Huang San Jia Jian* (Modified Yellow-Draining Powder)
 - Chu Shi Wei Ling Tang Jia Jian* (Modified Eliminate Dampness Decoction Combining Calm the Stomach and Five Ingredient Powder with Poria)
- Patent medicines:**
 - Wang Shi Bao Chi Wan* (Master Wang's Red Pill for Protecting Infants)
 - Yin Qiao San* (Honeysuckle and Forsythia Powder)
- External Herbal Treatment:**
 - Di Yu* and *Guan Zhong* decocted and used as wet compress for 15 minutes 2-4 times a day
 - Qing Dai Gao* (Indigo Paste)
 - Di Hu Hu* (Sanguisorba and Giant Knotweed Paste)
 - Huang Ai You* (Coptis and Mugwort Leaf Oil)
 - Qu Shi San* (Powder for Dispelling Dampness)
 - Pi Yan Xi Ji* (Lotion for Dermatitis)
 - Zhi Yang Xi Ji* (Lotion to Stop Itching)
 - Jie Du Cha Ji* (Liniment to Relieve Toxicity) (Jin, 1996)
 - Shi Zhen San* (Eczema Powder)

The heat with dryness pattern is called Fetal Heat and it is more commonly seen with undernourished infants who have a yellow complexion. There may be bleeding or bloody crusts caused by scratching, as itching can be severe with this pattern.

Infantile Fetal Heat Pattern
(Yihou, 2004) and (Shen, 1996) unless otherwise noted
Please see Appendix 2 for Herbal Formula Ingredients



Infantile atopic eczema, fetal heat pattern
<http://dermnetnz.info/dermatitis/atopic-imgs.html>

- Dermatological Symptoms: Bleeding or bloody crusts caused by scratching, as itching can be severe with this pattern
- Other Symptoms: Yellow complexion, may look undernourished, indigestion (spitting up milk shortly after feeding), loose stools, possibly with undigested food
- Tongue: Pale red body with a scanty coat
- Pulse: Moderate
- Internal Herbal Treatment:
 - *San Xin Dao Chi San Jia Jian* (Modified Three-Pith Guide Out the Red Powder)
- Patent medicines:
 - *Wang Shi Bao Chi Wan* (Master Wang's Red Pill for Protecting Infants)
- External Herbal Treatment:
 - *Run Ji Gao* (Flesh-moistening Paste) Apply 1-2 times per day
 - *Huang Lian Ruan Gao* (Coptis Ointment) Apply 1-2 times per day
 - *Wu Yun Gao* (Black Cloud Paste) Apply 1-2 times per day

When treating infantile atopic eczema, the focus is always on the Heart, and on clearing heat and relieving toxicity. It will be important to address dampness as well if it is present. As it can be difficult to give medicine of any kind to infants, a mother who is breast feeding can take the herbal formula herself and this will have a therapeutic

effect on the baby through the breast milk. If possible, the decoction can also be given to the baby one spoonful at a time throughout the day (Yihou, 2004, p.107). During the infantile stage it is important to pay attention to the baby's digestive function. Food and drink that the mother or baby are consuming may cause eczema to flare. The infant should not be washed in hot water and the infant can wear gloves at night if scratching is a problem (Yihou, 2004, p.108).

During the childhood phase, from 3 to 12 years, the pruritic lesions most often manifest at the antecubital and popliteal fossae, the neck, wrists and ankles. There are two primary patterns during the childhood phase, Damp-Heat and Spleen/Stomach deficiency.

Childhood Damp Heat Pattern

(Yihou, 2004) and (Shen, 1996) unless otherwise noted
Please see Appendix 2 for Herbal Formula Ingredients



Childhood atopic eczema, damp-heat pattern

<http://dermnetnz.info/dermatitis/atopic.html>

•**Dermatological Symptoms:** Lesions are usually found at the antecubital and popliteal fossae, neck, wrists and ankles. Pinpoint papules, papulovesicles, and vesicles. Itching is likely to be severe and scratching may cause bleeding and exudates.

•**Tongue:** Red body with a thin, yellow coat

•**Pulse:** Soggy and rapid

•**Internal Herbal Treatment:** •*Chu Shi Wei Ling Tang Jia Jian* (Modified Eliminate Dampness Decoction Combining Calm the Stomach and Five Ingredient Powder with Poria)

•**Patent medicines:** • *Long Dan Xie Gan Tang* (without *Mu Tong*)

•**External Herbal Treatment:** • *Hei Dou Liu You Ruan Gao* (Black Soybean and Vaseline Ointment)
• *Huang Lian Ruan Gao* (Coptis Ointment)
• *Wu Shi Gao* (Five-Stone Paste)
• *Jia Wei Huang Qin Gao* (Modified Scute Ointment)
• *He You Gao* (Black Ointment)
• *E Huang San* (Light Yellow Powder)

Childhood Spleen/Stomach Deficiency Pattern

(Yihou, 2004) and (Shen, 1996) unless otherwise noted

Please see Appendix 2 for Herbal Formula Ingredients

**Childhood atopic eczema, Spleen and Stomach deficiency pattern**<http://dermnetnz.info/dermatitis/atopic.html>

•**Dermatological Symptoms:** Lesions are usually found at the antecubital and popliteal fossae, neck, wrists and ankles. Papules and vesicles, but the skin will be rough and dry, possibly with scaling

•**Other Symptoms:** This pattern more often seen in children and adults with a deficient or weak constitution and is often a recurring condition. Pale complexion, lassitude, poor appetite, abdominal distention, diarrhea

•**Tongue:** Pale body with a greasy coat

•**Pulse:** Thready and weak, or deep and slippery

•**Internal Herbal Treatment:**

- *Jian Pi Chu Shi Tang He Chu Shi Wei Ling Tang Jia Jian* (Decoction for Fortifying the Spleen and Eliminating Dampness Combined with Poria Five Decoction for Eliminating Dampness and Calming the Stomach with Modifications)
- *Xiao Feng San* (Eliminate Wind Powder)
- *Dang Gui Yin Zi* (Dang Gui Decoction) (Jin, 1996)

•**External Herbal Treatment:**

- *Hei Dou Liu You Ruan Gao* (Black Soybean and Vaseline Ointment) Apply 1-3 times per day.
- *Huang Lian Ruan Gao* (Coptis Ointment) Apply 1-3 times per day.
- *Wu Shi Gao* (Five-Stone Paste) Apply 1-3 times per day.
- *Jia Wei Huang Qin Gao* (Modified Scute Ointment) Apply 1-3 times per day.
- *He You Gao* (Black Ointment) Apply 1-3 times per day.
- *E Huang San* (Light Yellow Powder) Apply 1-3 times per day.

Adult Blood-Dryness Pattern

(Yihou, 2004) and (Shen, 1996) unless otherwise noted
Please see Appendix 2 for Herbal Formula Ingredients



Adult atopic eczema, blood-dryness pattern

<http://dermnetnz.info/dermatitis/atopic-imgs.html>

•**Dermatological Symptoms:** Lesions are usually found on the elbows, knees and neck and they often present with thickening, lichenification, and ill-defined borders, reflecting chronic loss of nourishment to the skin. Itching is especially severe at night, perhaps because it is the yin time and the yin is damaged in this pattern. It is not uncommon for patients to scratch so much that they cause bleeding, exudates, and then scabbing.

•**Other Symptoms:** Skin is often quite dry

•**Tongue:** Pale red body with a scanty coat

•**Pulse:** Thready and rapid

•**Internal Herbal Treatment:**

- *Internal herbal treatment must seek to nourish the Yin and Blood while eliminating Dampness as well as moistening Dryness and alleviating itching.*
- *Zi Yin Chu Shi Tang Jia Jian* (Modified Decoction for Enriching Yin and Eliminating Dampness)
- *Dang Gui Yin Zi* (Dang Gui Decoction) (Jin, 1996)
- *Man Xing Shi Zhen Tang + Black Snake* (Jin, 1996)

•**External Herbal Treatment:**

- *Hu Po Er Wu Hu Gao* (Succinum and Two-Aconite Paste) Apply 1-2 times per day.
- *Di Yu Er Cang Hu Gao* (Sanguisorba, Xanthium, and Atractylodes Paste) Apply 1-2 times per day.
- *Run Ji Gao* (Flesh-moistening Paste) in combination with *Shi Zhen Fen* (Eczema Powder) or *Lu Hu Xi Ji* (Calamine and Giant Knotweed Wash Preparation) Apply 1-2 times per day.
- *Huang Qin Gao* (Scute Ointment) (Jin, 1996) Apply 1-2 times per day.

When it comes to acupuncture treatment, there are about 20 standard points that can be needled, depending on the AE patient's presenting symptoms. Other modalities

can also be used, including: plum-blossom, moxibustion, bleeding cupping and auricular points. The most commonly used acupuncture points are as follows: LI4, LI11, TB5, DU14, Sp6, Sp9, Sp10, Ht7, Ht8, ST36, ST40, BL17, Pc4, Lu10, Lr2, Kd2, CV3, CV9 and GB31 (Jin, 1996). See Appendix 3.

For chronic cases, where there is no visible outbreak, plum-blossom technique can be used. However, in acute cases where the skin is red, broken, or inflamed, plum-blossom should never be used (Jin, 1996)

Both direct and indirect moxa may be used to treat eczema. Yuki (2007) reported in a paper published in *The North American Journal of Oriental Medicine* that he successfully used direct moxa cones to treat a patient with atopic eczema who presented with dry skin, red papules and itching. The author herself has experience treating one patient using direct moxa with great success.

Tian (2000) reports successful results using bleeding cupping at BL13 and BL39 to treat refractory eczema of the hand. He treated 38 patients with 94.7% of patients reporting some degree of improvement.

Chen (2007) reports that some auricular points can also be helpful for the treatment of atopic eczema. She cites the auricular points Lung, Heart, Spleen, Adrenal and Shenmen as being particularly useful.

TCM Research

Most of the TCM research on treatment of atopic eczema to date has focused on internal Chinese herbal medicine as opposed to treatment with acupuncture or other modalities, including external use of Chinese herbal medicine. Some intriguing studies have been published, and all but one of these studies show that acupuncture and/or Chinese herbal medicine can reduce severity of symptoms in patients with atopic eczema. It is clear that more research is necessary, but there is promising evidence that TCM is an effective way to treat this common and challenging disease.

The one randomized controlled trial published to date that focuses solely on acupuncture as treatment for AE is a fascinating and very well designed study (Pfab et al, 2009). Adult patients (n=30) with AE and no knowledge of acupuncture or the itch or wheal/flare response to skin-prick testing with grass pollen were chosen for the study. All patients had a known sensitivity to grass pollen. The researchers first measured temperature and regional blood flow with LASER-doppler on the left forearm with each patient at rest. They then pricked the forearm and deposited the grass pollen at the “dermal-epidermal junction, where the terminal endings of itch-related c-fibers are located” (Pfab et al, 2009). The researchers then measured the patients’ desire to scratch over the next 15 minutes using a visual analog scale (VAS). Next, the patients were divided, through randomization, into three groups: ‘verum-point’ (VA), or true acupuncture, ‘placebo-point’ (PA), or sham acupuncture, and no acupuncture (NA). The acupuncture points used for the VA group were Large Intestine 11 (*quchi*) and Spleen 10 (*xuehai*). The placebo points were at non-recognized points on the deltoid and rectus femoris. See Figure 1.

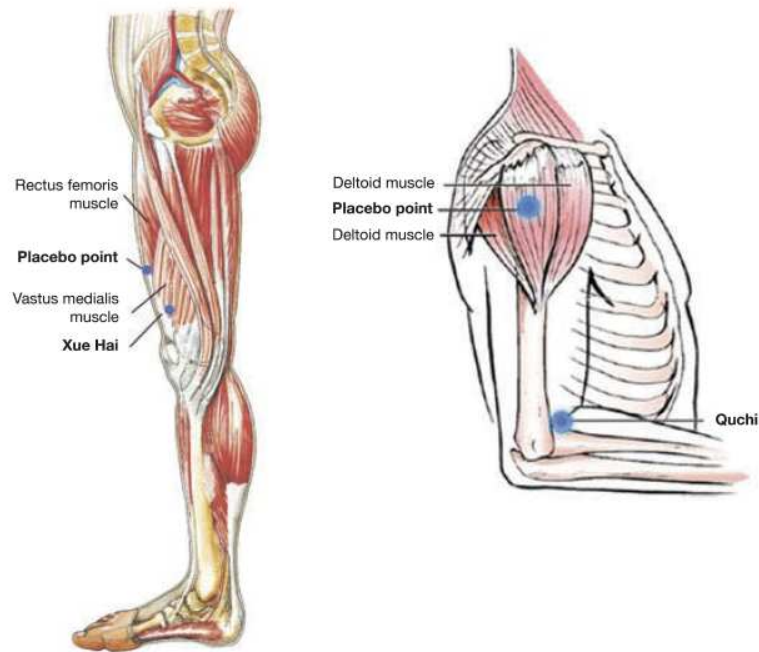


Figure 1

Each patient received their designated treatment (or lack thereof in the case of the no acupuncture group) four minutes after the first allergen itch stimulus. Then, six minutes later (10 minutes after then initial itch stimulus) wheal and flare reactions, regional blood flow and temperature were measured at the stimulus site. Next, at minute 15, each patient completed the Eppendorf Itch Questionnaire (EIQ), which is a validated way to measure qualitative and quantitative pruritis. The patients then rested for 15 minutes and then the process began again, with pre-measurements taken and allergen itch stimulus was once again introduced into the skin. For the next 15 minutes, every 20 seconds the patients were asked to rate itch intensity using a VAS. Ten minutes after the second stimulus was introduced, the wheal and flare reactions, regional blood flow and temperature were once again measured at the stimulus site, and five minutes later a second EIQ was completed by the patients (Pfab et al, 2009). See Figure 2.

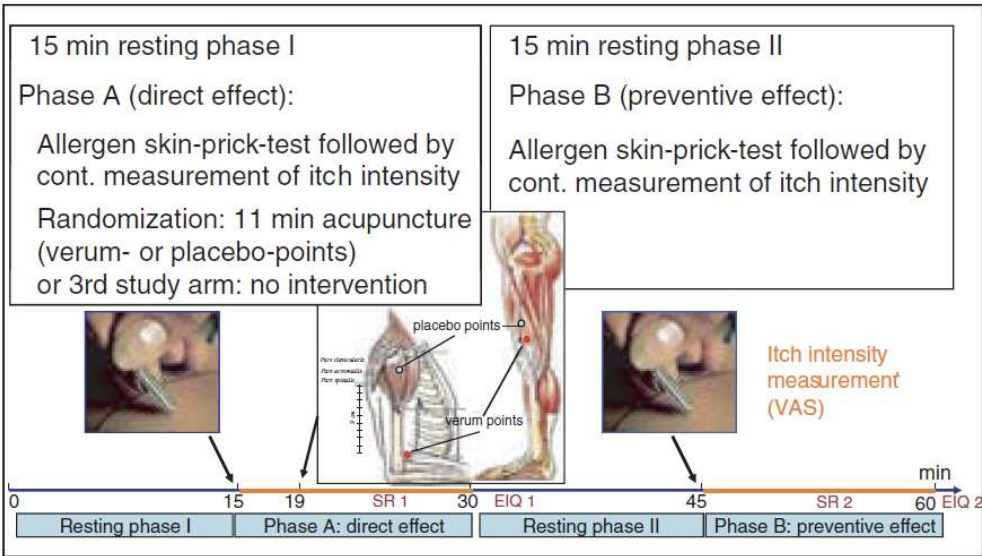


Figure 2

The researchers of this study reported that for all measurements, VA had a stronger therapeutic effect than PA and PA had a stronger therapeutic effect than NA. Mean itch intensity (measuring direct effect) was the lowest with VA, and the mean wheal and flare size (measuring preventive effect) were significantly smaller with VA, compared to PA and NA. The EIQ ratings were also significantly lower with VA compared to NA and PA for the direct effect. For the preventive effect, both VA and PA resulted in lower EIQ scores compared to NA (Pfab et al, 2009).

This study highlights three important aspects. First, the trial was designed in such a way that the researchers were able to study both the direct effect and the preventive effect of acupuncture treatment. Second, the researchers were able to compare the effects of both real acupuncture, sham acupuncture and no acupuncture. Finally, they were able to measure results from both an objective (temperature and regional blood flow) and a subjective (patient reported itch intensity) standpoint.

In the early 1990's a team of researchers from London carried out two RCTs that studied the effects of Chinese herbal medicine on patients with atopic eczema (Sheehan et al, 1992). One study was done with adult patients and one with children. In the adult study, patients (n=31) were randomized into active treatment and placebo treatment groups. The first group received active treatment for 8 weeks, followed by a 4 week wash-out period during which no treatment was given, and then received 8 weeks of herbal placebo treatment. The second group first received the placebo treatment for 8 weeks, followed by a 4 week wash-out period and then received 8 weeks of active treatment. The active treatment was a daily dose of a decoction of a patented herbal formula called Zemataphyte™. This formula contained 10 herbs: *Ledebouriella seseloides*, *Potentilla chinensis*, *Clematis armandii*, *Rehmannia glutinosa*, *Paeonia lactiflora*, *Lophatherum gracile*, *Dictamnus dasycarpus*, *Tribulus terrestris*, *Glycyrrhiza glabra*, and *Schizonepta tenuifolia* (Sheehan et al, 1992).

The herbal placebo was created to have a similar smell and taste and to be of a similar weight as the genuine formula. The placebo formula contained the following herbs: *Humulus lupulus*, *Hordeum distichon*, *Hordeum distichon ustum*, baker's bran (wheat), sucrose, *Salvia* spp, *Thymus vulgaris*, *Rosmarinus officianalis*, *Mentha piperita*, and *Oleum caryophylli*. It was not stated how or why the researchers chose these herbs for the placebo herbal formula. The researchers used a standard scoring system to measure erythema and extent of surface damage (Sheehan et al, 1992). This system is similar to the SCORAD and ESAI scoring systems that were discussed earlier. The researchers also asked the patients to subjectively record whether they were itching less and sleeping better throughout all phases of the study.

The results of this study are quite interesting, as we can see from Figure 3, which measures (A) erythema and (B) surface damage. First, both active and placebo groups showed improvement, but during active treatment the improvement was far greater. It is not surprising that the active group showed improvement, but it is curious that the placebo group also showed some improvement. This could be explained by the fact that patients often show improvement when they are receiving consistent medical care and support and they are expecting their condition to improve. Another possibility is that the herbs used in the placebo treatment could potentially also have therapeutic effects.

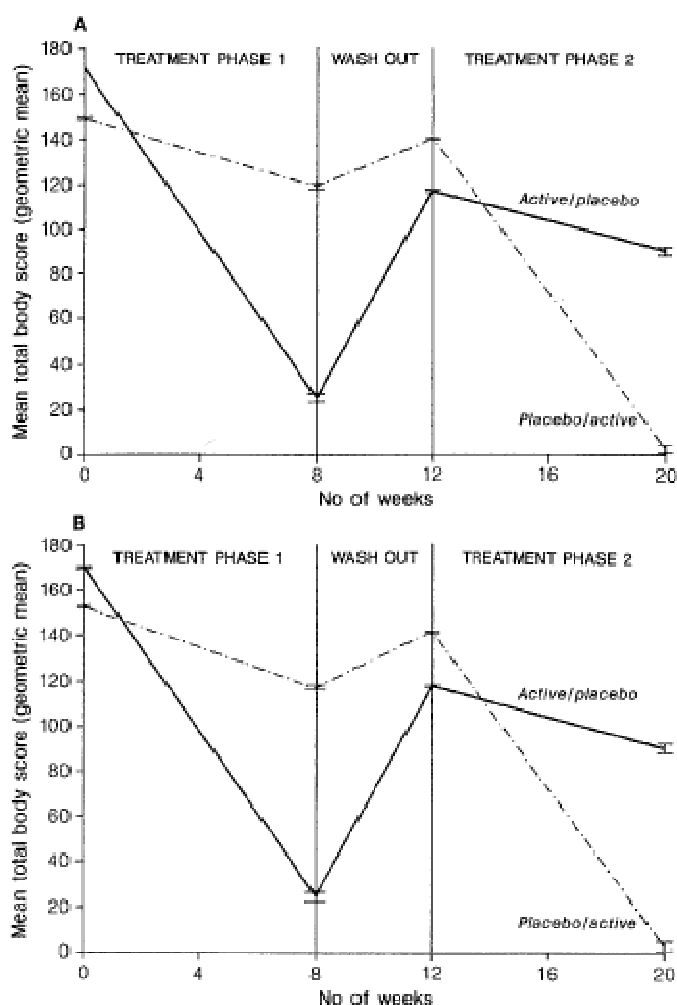


Figure 3

There is also a clear return of symptoms during the wash-out period, which further validates the effectiveness of the herbal treatment. Finally, 14 out of 31 subjects reported that they itched less during the active treatment phase while only 1 out of 31 itched less during the placebo period. Fifteen out of 31 reported sleeping better during active treatment, while only 6 said they slept better during the placebo phase. Furthermore, subjects reported less topical corticosteroid use while on active treatment compared to the placebo phase (Sheehan et al, 1992).

A group of researchers in Hong Kong attempted to reproduce the London study using the herbal formula Zemaphyte™ to treat patients with AE (Fung et al, 1999). This study was conducted almost identically to the London study, but the results showed no statistical significance of the active herbal treatment being any more effective than the placebo. This publication is interesting because due to the unexpected clinical results, the researchers were required to speculate as to why this study did not yield the results they were hoping for. Their speculations bring up a number of issues and complications regarding TCM research. The first issue is that of racial variability. This issue is, of course, not limited to TCM; it is widely known in the medical world that different races can and do have different pharmacological responses and pathophysiological processes. This factor of racial variability can be extended to examine the role of season, climate, diet and lifestyle as well. Second, length of treatment may be a factor. Different groups of people may respond to treatment at different rates; if the study had been of a longer duration there may have been more positive results. Third, the Hong Kong group used a

lower dosage of the herbal formula because their Chinese patients had a lower body weight than the London patients. This was a logical change to make, but it is also widely known that Chinese doctors in China prescribe much larger herbal dosages than what are prescribed in the West (S. Fang, personal communication, April 10, 2009). Perhaps if the dosages had been higher in this study then there would have been statistically significant findings. Fourth, the researchers bring up the issue of what they call “individualized polypharmacy” versus “monotherapy.” That is, the difference between the TCM approach, where an herbal formula is tailored to an individual and the Western approach in which a standard preparation for every patient is used (Fung et al, 1999).

This last issue of individualization versus a ‘one size fits-all’ approach brings us to the final study to be discussed here, which was published in 2008 by a research group in Tel Aviv (Salameh et al, 2008). This was a prospective clinical study that is notable for two reasons. First, the researchers used a combination treatment of both acupuncture and Chinese herbal medicine. Second, the herbal formulas were tailored to meet each individual’s needs. The acupuncture treatments may have been individually tailored as well, but the article does not make this clear.

Twenty patients with atopic eczema were given acupuncture treatment twice a week and a Chinese herbal formula (in a concentrated powder form that was mixed with boiled water) which they took three times daily for a period of 12 weeks. Patients were assessed prior to treatment and every 3 weeks after that, using the EASI, DLQI and patient assessment of itch using a visual analog scale (VAS) (Salameh et al, 2008). Very encouraging results were reported. At the end of the 12 week study the mean patient EASI fell from 4.99 to 1.81, the DLQI decreased from 12.5 to 7.6 and the mean VAS decreased from 6.8 to 3.7 (Salameh et al, 2008). These results were both clinically and statistically significant.

It is true that this study does not carry as much weight as an RCT, as it is simply a prospective study with no control group, no randomization and no blinding. However, it is a very promising study and hopefully more research will be done that explores the benefit of combined acupuncture and Chinese herbal medicine. Furthermore, it would be wonderful to find a way to study individually tailored treatments within the confines of an RCT.

Conclusion

Atopic eczema is still a poorly understood disease and the aim of most biomedical treatment is suppression of symptoms. As medical knowledge advances, it is certain that in the future there will be better options for biomedical treatment of AE that seeks to treat the root cause. It is fundamental to the philosophy of TCM that a physician should seek to treat both the root cause and the symptoms (branch) of any disease. Therefore, the aim of TCM treatment for atopic eczema is to both relieve the eczematous symptoms as well as seeking to cure the underlying imbalance, such as damp-heat or Spleen and Stomach deficiency. Children and adults who suffer from atopic eczema would benefit greatly from concurrent biomedical and TCM treatment as well as a thorough and ongoing education about how to manage their disease. Since AE is a difficult disease to cure, treatment should focus on reducing frequency and severity of outbreaks (H. Jin, personal communication, May 3, 2010). Biomedical treatment is especially good at offering a quick acting solution for rapid relief, but not necessarily long-term resolution (Traidl-Hoffmann, et al., 2010). In fact, it has been shown that the primary reason people with AE turn to complementary medicine like TCM is because

conventional biomedical treatment has failed to sufficiently relieve their symptoms (Johnston, et al., 2003). It is clear that successful treatment of AE requires a multi-factorial approach, including: patient education, reduction of inflammation, control of pruritis, avoidance of irritants, and proper skin care (Warner & Camisa, 1998). TCM treatment can be a very helpful piece of this puzzle, as studies have shown (Hon, et al., 2007; Pfab, et al., 2010; Salameh, et al., 2008; Sheehan, et al., 1992). Furthermore, since TCM focuses on pattern differentiation and treating underlying root causes, it is this author's opinion that treatment of atopic eczema with TCM can promote a patient's transformation towards a more fundamental core state of well-being, in addition to improving symptoms.

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Appendix 1

Measuring Atopic Eczema

EASI Score

(Oakley, 2010, <http://dermnetnz.org/dermatitis/easi.html>)

An EASI score is a tool used to measure the severity and extent of atopic eczema (Eczema Area and Severity Index). It takes a few minutes and experience to calculate it accurately.

Body regions

There are four body regions:

1. Head and neck
2. Upper limbs
3. Trunk
4. Lower limbs

The intensity of a representative area of eczema and the approximate percentage affected by eczema are calculated for each region.

Intensity

A representative area of eczema is selected for each body region. The intensity of redness (erythema), thickness (induration, papulation, oedema), scratching (excoriation) and lichenification (lined skin) of the eczema is assessed as none (0), mild (1), moderate (2) and severe (3). Half scores are allowed.

Eczema: severity scoring				
Intensity	Absent	Mild	Moderate	Severe
Redness				
	<input type="checkbox"/> Score 0	<input type="checkbox"/> Score 1	<input type="checkbox"/> Score 2	<input type="checkbox"/> Score 3
Thickness				
	<input type="checkbox"/> Score 0	<input type="checkbox"/> Score 1	<input type="checkbox"/> Score 2	<input type="checkbox"/> Score 3
Scratching				
	<input type="checkbox"/> Score 0	<input type="checkbox"/> Score 1	<input type="checkbox"/> Score 2	<input type="checkbox"/> Score 3



Calculation for intensity

The four intensity scores are added up for each of the four body regions to give subtotals A1, A2, A3, A4.

Each subtotal is multiplied by the body surface area represented by that region.

- A1 x 0.1 gives B1 (in children 0-7 years, A1 x 0.2 gives B1)
- A2 x 0.2 gives B2
- A3 x 0.3 gives B3
- A4 x 0.4 gives B4 (in children 0-7 years, A1 x 0.3 gives B1)

Area

The percentage area affected by eczema is evaluated in the four regions of the body. In each region, the area is expressed as nil (0), 1-9% (1), 10-29% (2), 30-49% (3), 50-69% (4), 70-89% (5) or 90-100% (6).

- Head and neck
- Upper limbs
- Trunk
- Lower limbs

Calculations for area

Each of the body area scores is multiplied by the area affected.

- B1 x (0 to 6)= C1
- B2 x (0 to 6)= C2
- B3 x (0 to 6)= C3
- B4 x (0 to 6)= C4

Total score

The EASI score is C1 + C2 + C3 + C4.

Example

A 3-year-old child has an acute flare-up of atopic eczema. The flare-up affects limb flexures, and the child's trunk is also rather pink and dry.

- The head and neck intensity score is nil, as it is unaffected: A1 is 0.
- The eczema in the elbow flexure is moderately red, mildly thickened, moderately scratched but not lichenified: A2 is 2 + 1 + 2 = 5
- On the trunk it is mildly red, mildly thickened and not scratched or lichenified: A3 is 1 + 1 + 0 + 0 = 2.
- The eczema behind the knees is severely red, severely thickened, severely scratched and mildly lichenified: A4 is 3 + 3 + 3 + 1 = 10

The intensity scores are then adjusted as follows:

- $B1 = A1 \times 0.2 = 0$
- $B2 = A2 \times 0.2 = 1.0$
- $B3 = A3 \times 0.3 = 0.6$
- $B4 = A4 \times 0.4 = 4.0$

Less than 10% of the arms is affected, around 60% of the trunk and somewhere between 10 and 29% of the lower limbs.

- $C1 = B1 \times 0 = 0.0$
- $C2 = B2 \times 1 = 1.0$
- $C3 = B3 \times 4 = 2.4$
- $C4 = B4 \times 2 = 8.0$

$EASI = C1 + C2 + C3 + C4 = 11.4$

SCORAD

(Oakely, 2010, <http://dermnetnz.org/dermatitis/scorad.html>)

SCORAD is a clinical tool used to assess the extent and severity of eczema (**SCOR**ing **A**topic **D**ermatitis). Dermatologists may use this tool before and after treatment to determine whether the treatment has been effective.

Area

To determine extent, the sites affected by eczema are shaded on a drawing of a body. The rule of 9 is used to calculate the affected area (A) as a percentage of the whole body.

- Head and neck 9%
- Upper limbs 9% each
- Lower limbs 18% each
- Anterior trunk 18%
- Back 18%
- 1% each for genitals, each palm and the back of each hand.

The score for each area is added up. The total area is 'A', which has a possible maximum of 100%.

Intensity

A representative area of eczema is selected. In this area, the intensity of each of the following signs is assessed as none (0), mild (1), moderate (2) or severe (3).

- Redness
- Swelling
- Oozing / crusting
- Scratch marks
- Skin thickening (lichenification)

- Dryness (this is assessed in an area where there is no inflammation)

The intensity scores are added together to give 'B' (maximum 18).

Atopic dermatitis: intensity scoring



☐ Redness: 1; Swelling: 0;
Oozing: 0; Scratching: 0;
Lichenification: 1.

☐ Redness: 2; Swelling: 1;
Oozing: 1; Scratching: 1;
Lichenification: 1.

☐ Redness: 1; Swelling: 1;
Oozing: 1; Scratching: 3;
Lichenification: 3.

Subjective symptoms

Subjective symptoms i.e., itch and sleeplessness, are each scored by the patient or relative using a visual analogue scale where 0 is no itch (or no sleeplessness) and 10 is the worst imaginable itch (or sleeplessness). These scores are added to give 'B' (maximum 20).

Total score

The SCORAD for that individual is $A/5 + 7B/2 + C$

DERMATOLOGY LIFE QUALITY INDEX

DLQI

Hospital No:

Date:

Name:

Score:

Address:

Diagnosis:

The aim of this questionnaire is to measure how much your skin problem has affected your life OVER THE LAST WEEK. Please tick ☐ one box for each question.

- | | | |
|----|---|---------------------------------------|
| 1. | Over the last week, how itchy, sore, painful or stinging has your skin been? | Very much <input type="checkbox"/> |
| | | A lot <input type="checkbox"/> |
| | | A little <input type="checkbox"/> |
| | | Not at all <input type="checkbox"/> |
| 2. | Over the last week, how embarrassed or self conscious have you been because of your skin? | Very much <input type="checkbox"/> |
| | | A lot <input type="checkbox"/> |
| | | A little <input type="checkbox"/> |
| | | Not at all <input type="checkbox"/> |
| 3. | Over the last week, how much has your skin interfered with you going shopping or looking after your home or garden ? | Very much <input type="checkbox"/> |
| | | A lot <input type="checkbox"/> |
| | | A little <input type="checkbox"/> |
| | | Not at all <input type="checkbox"/> |
| | | Not relevant <input type="checkbox"/> |

- | | | |
|-----|---|---|
| 4. | Over the last week, how much has your skin influenced the clothes you wear? | Very much <input type="checkbox"/>
A lot <input type="checkbox"/>
A little <input type="checkbox"/>
Not at all <input type="checkbox"/>
Not relevant <input type="checkbox"/> |
| 5. | Over the last week, how much has your skin affected any social or leisure activities? | Very much <input type="checkbox"/>
A lot <input type="checkbox"/>
A little <input type="checkbox"/>
Not at all <input type="checkbox"/>
Not relevant <input type="checkbox"/> |
| 6. | Over the last week, how much has your skin made it difficult for you to do any sport ? | Very much <input type="checkbox"/>
A lot <input type="checkbox"/>
A little <input type="checkbox"/>
Not at all <input type="checkbox"/>
Not relevant <input type="checkbox"/> |
| 7. | Over the last week, has your skin prevented you from working or studying ? | Yes <input type="checkbox"/>
No <input type="checkbox"/>
Not relevant <input type="checkbox"/> |
| | If "No", over the last week how much has your skin been a problem at work or studying ? | A lot <input type="checkbox"/>
A little <input type="checkbox"/>
Not at all <input type="checkbox"/> |
| 8. | Over the last week, how much has your skin created problems with your partner or any of your close friends or relatives ? | Very much <input type="checkbox"/>
A lot <input type="checkbox"/>
A little <input type="checkbox"/>
Not at all <input type="checkbox"/>
Not relevant <input type="checkbox"/> |
| 9. | Over the last week, how much has your skin caused any sexual difficulties ? | Very much <input type="checkbox"/>
A lot <input type="checkbox"/>
A little <input type="checkbox"/>
Not at all <input type="checkbox"/>
Not relevant <input type="checkbox"/> |
| 10. | Over the last week, how much of a problem has the treatment for your skin been, for example by making your home messy, or by taking up time? | Very much <input type="checkbox"/>
A lot <input type="checkbox"/>
A little <input type="checkbox"/>
Not at all <input type="checkbox"/>
Not relevant <input type="checkbox"/> |

Please check you have answered EVERY question. Thank you.

(Finlay, 1992, <http://www.dermatology.org.uk/quality/quality-dlqi-questionnaire.html>)

Appendix 2

Herbal Formulas

Infantile Damp-Heat

Xie Huang San Jia Jian (Modified Yellow-Draining Powder) (Yihou, 2004, p.105)

Huo Xiang.....	6g
Chao Huang Bai.....	6g
Fu Ling Pi.....	6g
Chao Huang Qin.....	6g
Shi Gao.....	10g, decocted for 30 minutes before adding to other ingredients
Shan Yao.....	4.5g
Fang Feng.....	4.5g
Jiao Zhi Zi.....	4.5g
Gan Cao.....	3g

Chu Shi Wei Ling Tang Jia Jian (Modified Eliminate Dampness Decoction Combining Calm the Stomach and Five Ingredient Powder with Poria) (Shen, 1996, p.166)

Fu Ling Pi.....	10g
Chao Huang Bai.....	10g
Chen Pi.....	10g
Ku Shen.....	10g
Zhu Ling.....	12g
Di Fu Zi.....	12g
Bai Xian Pi.....	12g
Huang Qi.....	12g
Yi Yi Ren.....	15g
Chi Xiao Dou.....	15g
Cang Er Zi.....	6g
Chan Tui.....	6g

Infantile Fetal Heat

San Xin Dao Chi San Jia Jian (Modified Three-Pith Guide Out the Red Powder) (Yihou, 2004, p.105)

Lian Qiao Xin.....	3g
Zhi Zi Xin.....	3g
Lian Zi Xin.....	6g
Sheng Di Huang.....	6g
Xuan Shen.....	6g
Chan Tui.....	6g
Shan Yao.....	10g

Bai Zhu.....10g
 Chao Bai Shao.....10g
 Chao Gu Ya.....10g
 Chao Mai Ya.....10g
 Gan Cao4.5g
 Deng Xin Cao.....5g

Childhood Damp-Heat

Chu Shi Wei Ling Tang Jia Jian (Modified Eliminate Dampness Decoction
 Combining Calm the Stomach and Five Ingredient Powder with Poria) (Yihou, 2004,
 p.105)

Fu Ling Pi.....10g
 Chao Huang Bai.....10g
 Chen Pi.....10g
 Ku Shen.....10g
 Zhu Ling.....12g
 Di Fu Zi.....12g
 Bai Xian Pi.....12g
 Huang Qi.....12g
 Yi Yi Ren.....15g
 Chi Xiao Dou.....15g
 Cang Er Zi.....6g
 Chan Tui.....6g

Childhood Spleen Stomach Deficiency

Jian Pi Chu Shi Tang He Chu Shi Wei Ling Tang Jia Jian (Decoction for Fortifying
 the Spleen and Eliminating Dampness Combined with Poria Five Decoction for
 Eliminating Dampness and Calming the Stomach with Modifications) (Yihou, 2004,
 p.106)

Chao Bai Zhu.....10g
 Cang Zhu.....10g
 Hou Po.....10g
 Chen Pi.....10g
 Fu Ling.....12g
 Ze Xie.....12g
 Zhu Ling.....10g
 Liu Yi San.....10g, wrapped
 Di Fu Zi.....15g
 Bai Xian Pi.....15g

Xiao Feng San (Eliminate Wind Powder) (Kuoch, 2009, p.53)

Jing Jie	3g
Fang Feng	3g
Chan Tui.....	3g
Ku Shen.....	3g
Cang Zhu.....	3g
Niu Bang Zi.....	3g
Zhi Mu.....	3g
Shi Gao.....	3g
Dang Gui	3g
Sheng Di Huang	3g
Hei Zhi Ma.....	3g
Mu Tong.....	1.5g
Gan Cao.....	1.5g

Dang Gui Yin Zi (Dang Gui Beverage to Nourish the Surface) (Jin, 1996, p.2)

Dang Gui.....	6g
Sheng Di Huang	6g
Bai Shao.....	6g
Chuan Xiong.....	6g
He Shou Wu.....	6g
Jing Jie.....	6g
Fang Feng.....	6g
Bai Ji Li.....	6g
Huang Qi (Bei).....	6g
Gan Cao.....	3g

Adult Blood Dryness

Zi Yin Chu Shi Tang Jia Jian (Modified Decoction for Enriching Yin and Eliminating Dampness) (Yihou, 2004, p.106)

Dang Gui.....	6g
Chao Bai Shao.....	6g
Chai Hu.....	6g
Huang Qin.....	6g
Shu Di Huang.....	15g
Di Gu Pi.....	15g
Yi Mu Cao.....	15g
Chao Zhi Mu.....	10g
Ze Xie.....	10g
Fang Feng.....	10g
He Shou Wu.....	10g
Gan Cao.....	10g

Dang Gui Yin Zi (Dang Gui Beverage to Nourish the Surface) (Jin, 1996, p.2)

Dang Gui.....	6g
Sheng Di Huang.....	6g
Bai Shao.....	6g
Chuan Xiong.....	6g
He Shou Wu.....	6g
Jing Jie.....	6g
Fang Feng.....	6g
Bai Ji Li.....	6g
Huang Qi (Bei).....	6g
Gan Cao.....	3g

Appendix 3

Acupuncture Actions and Indications

(Deadman, 2007)

Large Intestine 4, Hegu (Joining Valley) (p.103)

Actions:

Expels wind and releases the exterior
Promotes the movement of qi and blood
Regulates the defensive qi
Alleviates pain

Indications:

Wind rash

Large Intestine 11, Quchi (Pool at the Crook) (p.112)

Actions:

Clears heat
Cools the blood, eliminates wind, drains damp and alleviates itching
Regulates qi and blood
Alleviates pain

Indications:

Urticaria, wind rash, dry skin, scaly skin, itching of the skin

Triple Burner 5, Waiguan (Outer Pass) (p.396)

Actions:

Expels wind and releases the exterior
Clears heat
Alleviates pain

Indications:

Symptoms of wind-heat, wind-cold and wind-damp

Governing Vessel 14, Dazhui (Great vertebra) (p.545)

Actions:

Expels wind and firms the exterior
Clears heat
Pacifies wind

Indications:

Symptoms of wind-heat or wind-cold-dampness

Spleen 6, Sanyinjiao (Three Yin Intersection) (p.189)

Actions:

Tonifies the Spleen and Stomach
Resolves dampness
Invigorates blood
Alleviates pain

Indications:

Spleen and Stomach deficiency
Diarrhea, abdominal distension, vomiting of fluid after eating

Eczema, urticaria

Spleen 9, Yinlingquan (Yin Mound Spring) (p.194)

Actions:

Regulates Spleen and resolves dampness

Opens and moves the water passages

Indications:

Abdominal distension, diarrhea

Spleen 10, Xuehai (Sea of Blood) (p.196)

Actions:

Invigorates blood and dispels stasis

Cools blood

Benefits the skin

Indications:

Urticaria, eczema

Heart 7, Shenmen (Spirit Gate) (p.219)

Actions:

Calms the Spirit

Regulates and tonifies the Heart

Indications:

Insomnia, agitation of the Heart

Heart 8, Shaofu (Lesser Palace) (p.221)

Actions:

Clears heat from the Heart and Small Intestine

Calms the spirit

Alleviates pain

Indications:

Agitation and fullness

Stomach 36, Zusanli (Leg Three Miles) (p.158)

Actions:

Harmonizes the Stomach

Fortifies the Spleen and resolves dampness

Tonifies qi and nourishes blood and yin

Clears fire and calms the spirit

Alleviates pain

Indications:

Epigastric pain, distension and pain of abdomen

Undigested food in the stool

Stomach 40, Fenglong (Abundant Bulge) (p.165)

Actions:

Transforms phlegm and dampness

Clears phlegm from the Heart and calms the spirit

Alleviates pain

Indications:

Damp body
Constipation

Bladder 17, Geshu (Diaphragm Shu) (p.272)

Actions:

Invigorates blood and dispels stasis
Cools blood and stops bleeding
Nourishes and harmonizes the blood

Indications:

Epigastric pain, fullness of the abdomen, vomiting
Pain of the skin

Pericardium 4, Ximen (Xi-Cleft Gate) (p.373)

Actions:

Invigorates blood and dispels stasis
Cools blood
Calms the spirit
Moderates acute conditions

Indications:

Agitation, insomnia

Lung 10, Yuji (Fish Border) (p.88)

Actions:

Clears Lung heat
Harmonizes the Stomach and the Heart

Indications:

Heat in the body
Agitation of the Heart
Abdominal pain, vomiting

Liver 2, Xingjian (Moving Between) (p.474)

Actions:

Clears Liver fire
Spreads Liver qi
Clears heat

Indications:

Pain and itching of the genitals
Diarrhea, constipation, abdominal distension

Kidney 2, Rangu (Blazing Valley) (p.338)

Actions:

Clears deficiency heat
Regulates the Kidneys

Indications:

Itching of the genitals
Diarrhea

Conception Vessel 3, Zhongji (Middle Pole) (p.499)

Actions:

Benefits the Bladder, regulates qi transformation and drains damp-heat

Drains dampness

Dispels stagnation

Indications:

Genital itching

Conception Vessel 9, Shuifen (Water Separation) (p.508)

Actions:

Regulates the water passages

Harmonizes the intestines and dispels accumulation

Indications:

Edema

Vomiting after eating

Gallbladder 31, Fengshi (Wind Market) (p.448)

Actions:

Eliminates wind

Alleviates itching

Activates the channel and alleviates pain

Indications:

Itching of the whole body, urticaria

Appendix 4

CLEAR Review

Pfab, F., Huss-Marp, J., Gatti, A., Fuqin, J., Athanasiadis, I., Irnich, D., Raap, U., Schober, W., et al. (2010). Influence of acupuncture on type 1 hypersensitivity itch and the wheal and flare response in adults with atopic eczema – a blinded, randomized, placebo-controlled, crossover trial. *Allergy* 65, 903-910.

1. No training or clinical experience for the acupuncturist or the authors of the study were given.
2. Yes, inclusion and exclusion criteria for patient selection were presented.
3. Yes, the patient assignment process was described as randomized. No, the randomization process was not stated. However, each patient served as its own control and participated in all three groups, so I'm not sure if 'randomized' is still an appropriate description.
4. No demographic and medical history was presented, aside from the inclusion and exclusion requirements.
5. The two points used, Qu Chi and Xue Hai, were chosen for their ability to treat cutaneous pruritis, and Zhang's textbook was cited.
6. Yes, for the most part, but needle angle was not included in the description.
7. Yes.
8. Yes, the acupuncturist and observer were two different individuals and the observer was described as 'blinded'.
9. Yes, and there was no significant difference between those who guessed correctly, incorrectly, or did not know.
10. No follow-up data was presented.

Sheehan, M., Rustin, M., Atherton, D., Buckley, C., Harris, D., Brostoff, J., Ostlere, L., Dawson, A. (1992). Efficacy of traditional Chinese herbal therapy in adult atopic dermatitis. *Lancet* 340, 13-17.

1. No.
2. Yes, inclusion and exclusion criteria were presented.
3. Yes, the patient assignment process was described as randomized. The randomization process was not stated.

4. No demographic or medical history information was given.
5. Six of the herbs were recommended for treatment of dry, scaly skin (they cite the Nei Jing). Also, some of the herbs are said to have anti-inflammatory, sedative, and immunosuppressive properties.
6. Yes.
7. Yes.
8. The assessor of treatment effectiveness was not specifically described or mentioned, but the study was described as double-blind.
9. Patients were asked which part of the trial they preferred.
10. No follow-up data was presented.

Hon, K., Leung, T., Ng, P., Lam, M., Kam, W., Wong, K., Lee, K., Sung, Y., et al. (2007). Efficacy and tolerability of a Chinese herbal medicine concoction for treatment of atopic dermatitis: a randomized, double-blind, placebo-controlled study. *British Journal of Dermatology* 157, 357-363.

1. No.
2. Yes, inclusion and exclusion criteria were presented.
3. Yes, the patient assignment process was randomized. Herbal or placebo treatment was allocated by using a computer generated randomization code.
4. Yes.
5. No.
6. No.
7. Yes.
8. Yes.
9. No.
10. No.