

Theoretical Connotation and Clinical Practice of Atopic Dermatitis Based on the Traditional Chinese Medicine Therapy of “Tranquilizing the Heart and Calming the Mind”

Jie Ma¹, Mingjing Li¹, Hui Gao¹, Huan Li¹, Yiding Zhao², Yanli Song¹, Jingjing Wang¹, Na Lang³, Ping Song⁴, Yaozhou Huang¹, Huiyan Chi^{1,*}

¹ Department of Dermatology, Xiyuan Hospital, China Academy of Chinese Medical Sciences, Beijing, China

² Department of Dermatology, Shaanxi Academy of Traditional Chinese Medicine (Shaanxi Province Hospital of Traditional Chinese Medicine), Xi'an, Shaanxi, China

³ Preventive Treatment of Disease Department, Xiyuan Hospital, China Academy of Chinese Medical Sciences, Beijing, China

⁴ Xiyuan Hospital, China Academy of Chinese Medical Sciences, Beijing, China

***Correspondence:** Huiyan Chi, Department of Dermatology, Xiyuan Hospital, China Academy of Chinese Medical Sciences, Beijing 100091, China.

E-Mail: chihuiyan@163.com

Abstract

Atopic dermatitis (AD) is a chronic, relapsing inflammatory skin disease with a systemic pathogenesis that extends beyond the skin, significantly impacting patients' psychological well-being and quality of life. The limited efficacy of conventional treatments for core psychosomatic issues such as chronic pruritus, sleep disturbances, and anxiety has spurred interest in complementary therapies such as traditional Chinese medicine (TCM). This study explores the theoretical basis, clinical application, and underlying mechanisms of the TCM approach known as “Tranquilizing the Heart and Calming the Mind” in managing AD. Based on canonical TCM literature such as the *Huangdi Neijing*, this article details the role of the “Heart” in AD, encompassing both its physiological functions and pathological contributions to disease development. These findings establish this method as central to the AD treatment approach, especially when managing prominent psychological and sleep-related symptoms. We propose a flexible clinical framework utilizing a modified formula pivoting on *Os Draconis* (Long Gu) and *Concha Ostreae* (Mu Li). This formula is intended to regulate the “Heart-Spirit” to alleviate internal wind and dryness, thereby breaking the vicious cycle of pruritus, calming agitation, improving sleep, and reducing recurrences. In summary, this TCM therapy offers both a robust theoretical framework and an effective, patient-centered strategy for comprehensive AD management, underscoring the critical connection between mental-emotional balance and skin health. Consequently, it is essential that future research focuses on high-level evidence and mechanistic insights to validate and translate this approach into global practice.

Keywords: atopic dermatitis; tranquilizing the heart and calming the mind; traditional Chinese medicine; pruritus; brain-skin axis

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Background

Atopic dermatitis (AD) is a chronic, relapsing, inflammatory skin disease whose rising global prevalence poses a significant public health challenge^[1]. The disease burden extends far beyond skin inflammation and intense pruritus, characterized by a profound bidirectional relationship with psychological comorbidities that defines its clinical complexity. Patients in China aged ≥ 12 years with moderate-to-severe AD inadequately controlled by topical therapy experience substantial disease burden^[2], frequently enduring a vicious cycle where sleep disturbances, anxiety, and depression act as both consequences and exacerbating factors, severely impairing quality of life^[3]. Although modern targeted therapies, including biologics such as Janus kinase (JAK) inhibitors, represent significant advances through specific immune pathway modulation, their efficacy in addressing central pruritus sensitization and core psychological components remains limited^[4]. This therapeutic gap highlights AD as a quintessential psychosomatic disorder and has spurred a paradigm shift toward conceptualizing it as a systemic condition mediated by the integrated “brain-skin axis”. The brain-skin axis provides a physiological framework

for understanding bidirectional communication between the central nervous, endocrine, and immune systems. Psychological stress can activate the Hypothalamic-Pituitary-Adrenal (HPA) axis and sympathetic nervous system, leading to neurogenic inflammation, impaired skin barrier function, and lowered itch threshold. Conversely, chronic inflammation and persistent pruritic signals from the skin adversely affect brain regions regulating emotion and sleep.

Building upon this foundation, this article systematically proposes and elaborates a coherent traditional Chinese medicine (TCM) diagnostic and therapeutic system centered on the “Tranquilizing the Heart and Calming the Mind therapy” (Zhenxin Anshen Fa [镇心安神法]) (Figure 1). Similar to the well-established academic frameworks of other dermatological conditions such as psoriasis, the Tranquilizing the Heart and Calming the Mind therapy also represents a therapeutic system for atopic dermatitis grounded in years of practical experience^[5-7]. Atopic dermatitis is recognized as a disease area where TCM demonstrates distinct clinical advantages^[8]. The treatment of atopic dermatitis with TCM has attracted growing interest in clinical research

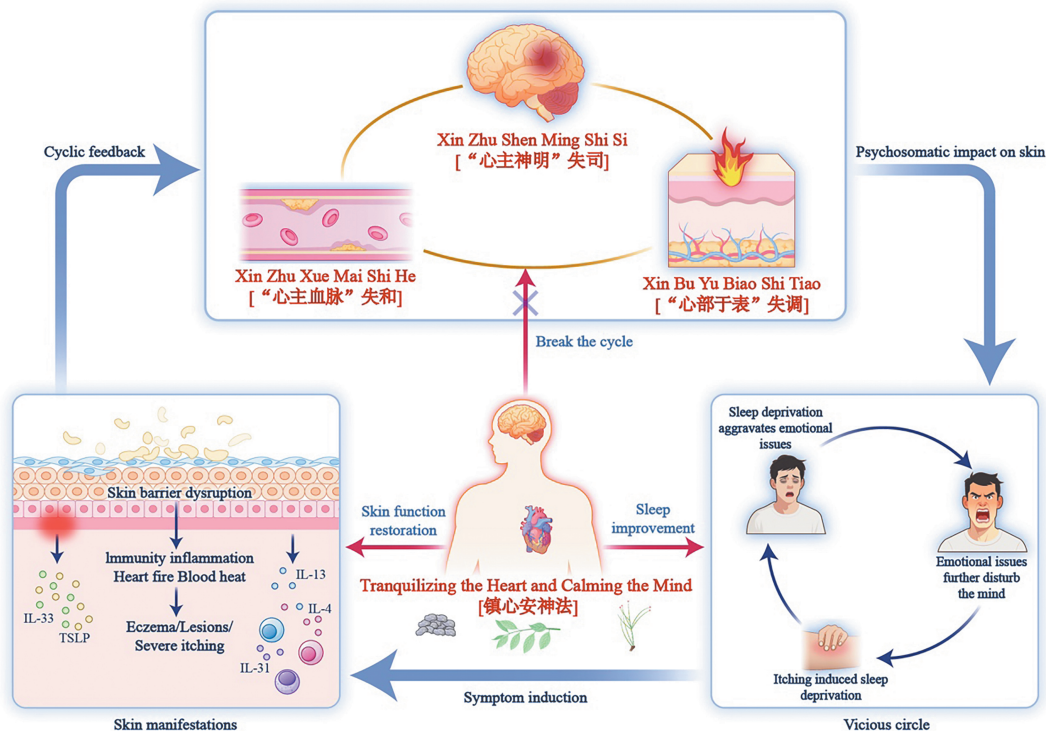


Figure 1: The graphic abstract of the “Tranquilizing the Heart and Calming the Mind” therapy for atopic dermatitis.

and has demonstrated promising clinical advantages^[9]. The Tranquilizing the Heart and Calming the Mind therapy has demonstrated substantial clinical efficacy in treating atopic dermatitis^[10-11]. The Tranquilizing the Heart and Calming the Mind therapy mediates its therapeutic efficacy in atopic dermatitis through mechanisms such as anti-inflammation, immune regulation, and the alleviation of oxidative stress^[12-13]. The therapeutic principle for atopic dermatitis in TCM typically centers on regulating the lung, spleen, and kidney^[14-16].

Theoretical connotation

Theoretical origins of traditional chinese medicine

The *Su Wen: Zhi Zhen Yao Da Lun* states, “All pains, itching, and sores belong to the Heart”, providing a fundamental basis for treating AD from the “Heart” perspective. In TCM, the “Heart” encompasses three interconnected functions: “The Heart Governs the Mind and Spirit” (Xin Zhu Shen Ming [心主神明]), “The Heart Governs the Blood and Vessels” (Xin Zhu Xue Mai [心主血脉]), and “The Heart Manifests at the Exterior” (Xin Bu Yu Biao [心部于表]). The intense pruritus, erythematous papules, and associated emotional and sleep disturbances in AD are closely related to the dysfunction of the Heart.

Dysfunction of the heart governing the mind and spirit: The core of the pruritus-sleep-emotion vicious cycle

As stated in *Su Wen: Ling Lan Mi Dian Lun*, “The Heart is the monarch organ from which spirit and consciousness emanate”. (Xinzhe, Junzhu Zhi Guan Ye, Shenming Chu Yan [心者,君主之官也,神明出焉]). The Heart governs mental activities, consciousness, and thinking, regulating the homeostasis of the Zang-fu organs. A tranquil Heart-Spirit ensures emotional stability, restful sleep, and nourished skin. Conversely, an unsettled Heart-Spirit leads to emotional fluctuations and sleep disturbances. The *Annotations on the Huang Di Nei Jing Su Wen* notes, “Restlessness of the Heart aggravates itching (Xin Zao Ze Tong Shen [心躁则痛甚])”, indicating the connection between pruritus and the Heart-Spirit. Persistent itching disturbs the Heart-Spirit, causing irritability and insomnia, while poor sleep lowers the pruritus threshold, forming a vicious cycle of “pruritus to Heart-Spirit disturbance to sleep disruption

to worsened pruritus”. Furthermore, as the “master of the five Zang and six Fu organs (Xin Wei Wuzang Liufu Zhi Dazhu [心为五脏六腑之大主])”, dysfunction of the Heart-Spirit can affect other organs, Heart-Fire may stir Liver-Wind; an unsettled Heart-Spirit may impair the Spleen’s transformation and transportation, leading to Dampness, and insomnia consuming Yin may disrupt the Heart-Kidney interaction, collectively exacerbating the condition.

Dysfunction of the heart governing the blood and vessels: Malnourishment of the skin and weakened interstitial space

According to *Su Wen: Liu Jie Zang Xiang Lun*, “The Heart fills the blood vessels (Xinzhe, Qi Chong Zai Xuemai [心者,其充在血脉])”, Heart-Qi propels blood circulation to nourish the Zang-fu organs and skin. The *Ling Shu: Ping Ren Jue Gu* states, “Harmonious blood vessels house a calm spirit (Xuemai Heli, Jingshen Nai Ju [血脉和利,精神乃居])”, reflecting the interdependence of Heart-Blood and the Heart-Spirit. *Su Wen: Tiao Jing Lun* emphasizes, “Imbalance of Qi and Blood gives rise to various diseases (Xueqi Buhe, Baibing Nai Bianhua Er Sheng [血气不和,百病乃变化而生])”, Deficiency of Heart-Qi, hyperactivity of Heart-Fire, or conditions such as Blood-Heat, Blood-Stasis, and Blood-Deficiency can manifest as pathological heat in the blood vessels. In AD, hyperactivity of Heart-Fire leads to external manifestation of Blood-Heat, presenting as erythema, burning sensation, and erosion. Chronic illness consuming Blood results in Blood-Deficiency generating Wind-Dryness, seen as dry, scaly skin. The *Jing Yue Quan Shu* observes, “All sores and ulcers arise from stagnation of Qi and Blood and retention of Nutritive and Defensive Qi (Fan Chuangyang Zhi Huan, Wufei Xueqi Yongzhi, Yingwei Jiliu Zhi Suozhi [凡疮疡之患,无非血气壅滞,营卫羁留之所致])”. Dysfunction of the Heart in governing the blood vessels, leading to Qi-Blood disharmony, results in malnourished skin and a weakened interstitial space, which is key to the persistent and refractory nature of AD.

Dysfunction of the heart manifesting at the exterior: Superficial weakening and susceptibility to external pathogens

Su Wen: Ci Jin Lun states, “The Heart manifests at the exterior (Xinzhe, Qi Chong Zai Xuemai [心者,其充

在血脉)。” As a Yang organ, Heart-Qi and Heart-Yang reach the body surface, regulating Defensive Qi (Wei Qi [卫气]) and the interstitial space. The *Huang Di Nei Jing Tai Su* explains, “The Heart corresponds to Fire and Summer, residing at the utmost Yang, hence it governs the exterior (Xin Zhe Wei Huo, Zai Xia, Ju Yu Taiyang Zui Shang, Gu Wei Biao [心者为火, 在夏, 居于太阳最上, 故为表]).” The flaring nature of Fire means that disharmony of the Heart-Spirit or Qi-Blood can lead to hyperactivity of Heart-Fire, which, combined with external pathogens, manifests on the skin as pruritus and irritability. Dysfunction of the Heart manifesting at the exterior has two implications: firstly, impaired distribution of Heart-Yang weakens Defensive Qi, affects the Lung’s diffusion and descent, and compromises the interstitial space, making it susceptible to Wind, Cold, and Dampness, further obstructing local Qi and Blood and creating a vicious cycle; secondly, an unsettled Heart-Spirit can sensitize the superficial sensory centers, causing intense pruritus from minor stimuli.

“The Heart Governs the Mind and Spirit”, “The Heart Governs the Blood and Vessels,” and “The Heart Manifests at the Exterior” are not isolated functions but an integrated, synergistic system. The Heart-Spirit, by regulating Qi and Blood circulation, influences the barrier function and sensory state of the body surface. The blood vessels, as the material conduit, nourish the Heart-Spirit to maintain its tranquility and transport nutrients to the skin and muscles. The body surface, connected to the Heart through the meridian system, externally reflects the state of the Heart-Spirit and blood vessels and can influence Heart function via “exterior disease transmitting inward.” When these three functions are coordinated, the Heart-Spirit is regulated, Qi and Blood are harmonious, and the body surface is secure. Dysfunction leads to an unsettled Heart-Spirit, Qi-Blood disharmony, and a weakened exterior, ultimately contributing to the onset and progression of AD. Therefore, AD treatment should focus on the central role of the Heart, employing the “Tranquilizing the Heart and Calming the Mind” method as the core therapeutic principle. By harmonizing the Heart-Spirit to relieve itching, regulating the blood vessels to nourish the skin, and consolidating the exterior to resist pathogens, the therapeutic goal of “regulated Heart-Spirit to harmonized Qi-Blood to relieved pruritus to healed skin” can be achieved. This is the fundamental strategy for improving the persistent and refractory state of AD.

Scientific interpretation from the perspective of modern medicine

The TCM theory of treating AD from the “Heart” is not merely a summary of traditional empirical knowledge. Modern medical research provides substantial scientific evidence from the perspectives of the neuro-immune-skin regulatory network, microcirculatory function, and skin barrier mechanisms, enriching the connotation of the “Tranquilizing the Heart and Calming the Mind” therapy.

Correlation between “The Heart Governs the Mind and Spirit” and the “Brain-Skin Axis”

The connotation of “The Heart Governs the Mind and Spirit” in TCM highly aligns with the modern “brain-skin axis” theory. The brain-skin axis is a complex regulatory network formed between the central nervous, endocrine, immune systems and the skin. Its core mechanism involves the influence of psychological stress on skin function via the neuro-endocrine-immune pathways^[17]. The Tang Dynasty physician Wang Bing, annotating the *Su Wen*, noted, “Restlessness of the Heart leads to severe itching.” AD patients often present with emotional disorders such as anxiety and depression, and stress is a significant factor in inducing or exacerbating the condition^[18]. The physiological response to stress primarily involves the activation of the HPA axis and the sympathetic nervous system (SNS). Stress activates mast cell-nerve fiber interactions via neuropeptides, promoting the release of thymic stromal lymphopoietin (TSLP) and amplifying Th2-type inflammation and pruritus in AD^[19]. Studies suggest that the Tranquilizing the Heart and Calming the Mind method can regulate the Transient Receptor Potential Vanilloid 1 (TRPV1) / Transient Receptor Potential Ankyrin 1 (TRPA1) / (GRPR) neural pathways, reduce Immunoglobulin E, and decrease the secretion of Th2 inflammatory cytokines such as Interleukin 4, Interleukin 5, Interleukin 13, and thymic stromal lymphopoietin (TSLP), thereby alleviating inflammation and pruritus in AD^[12].

Association between “The Heart Governs the Blood and Vessels” and skin microcirculation

Su Wen: Tiao Jing Lun states, “Imbalance of Qi and Blood gives rise to various diseases.” The *Jin Gui Yao Lue* notes, “Pathogens in the collaterals cause numbness

of the skin and muscles (Xie Zai Yu Luo, Ji Fu Bu Ren [邪在于络, 肌肤不仁]).” The TCM function of “The Heart Governs the Blood and Vessels” closely corresponds to the physiological role of skin microcirculation in modern medicine. Skin microcirculation is fundamental for maintaining skin health, with key functions including the delivery of nutrients and oxygen, the removal of metabolic waste, and immune regulation^[20]. Chronic inflammation in AD can lead to vascular endothelial dysfunction, increasing the risk of cardiovascular diseases^[21].

Systemic Regulation of “The Heart Manifests at the Exterior” and the neuro-immune-skin barrier

The TCM concept of “The Heart Manifests at the Exterior,” emphasizing central regulation of superficial body functions, is reflected in modern medicine as the synergistic interaction of the neuro-immune-skin barrier. AD patients exhibit significant abnormalities in cutaneous sensory nerve function, manifested as increased density of sensory nerve fibers and overexpression of pruritus receptors like TRPV1, leading to a lowered pruritus threshold^[22]. This aligns with the TCM pathogenesis of “abnormal superficial perception” due to disturbed Heart-Spirit impairing the distribution of Heart-Yang. Concurrently, impaired skin barrier integrity is a core pathological feature of AD. Modern pharmacological studies confirm that many herbs for tranquilizing the Heart and calming the Mind (e.g., *Os Draconis* (Long Gu), *Concha Ostreae* (Mu Li)) not only have central sedative effects^[23] and regulate neurotransmitters but also inhibit inflammatory cytokine secretion, antagonize histamine receptors, and promote skin barrier repair, demonstrating a holistic regulatory mechanism of “nerve-immune-skin.” This is consistent with the therapeutic approach of “consolidating the defensive exterior” in the TCM theory of “The Heart Manifests at the Exterior.” The “Tranquilizing the Heart and Calming the Mind” therapy, by regulating the distribution of Heart-Yang and the state of the Heart-Spirit, can reduce the sensitivity of the superficial sensory centers to alleviate pruritus and enhance skin barrier function to resist external pathogens, thereby breaking the vicious cycle of “barrier damage–external pathogen invasion–aggravated inflammation.”

Based on extensive clinical practice, Professor Huang

Yaozhou proposed that “dysregulation of the Heart-Spirit” is the core pathogenesis of AD. This theory is well-supported by modern research: stress factors such as emotional pressure and excessive contemplation activate stress pathways via the brain-skin axis, leading to the internal generation of Heart-Fire. Heart-Fire can either directly flare to the skin, causing acute symptoms like erythema, burning, and pruritus, or chronically consume Yin-Blood, resulting in Blood-Deficiency generating Wind-Dryness, manifesting as chronic symptoms like dry skin, lichenification, and pruritus. This pathogenesis comprehensively covers the entire disease course of AD, from “dysregulation of the Heart-Spirit” to “skin lesions,” and further to “emotional and sleep disorders.” It aligns with the holistic concept of TCM and corresponds to the multi-system regulatory mechanisms of modern medicine, establishing a solid theoretical and practical foundation for the “Tranquilizing the Heart and Calming the Mind” therapy as the core treatment principle.

Clinical practice

Basic therapeutic principles

Based on the pathogenesis involving dysfunction of “The Heart Governs the Mind and Spirit”, “The Heart Governs the Blood and Vessels” and “The Heart Manifests at the Exterior”, the clinical treatment of AD centers on “Tranquilizing the Heart and Calming the Mind,” while also considering regulating other Zang-fu organs, strengthening the body’s resistance, and eliminating pathogens. It adheres to the principle of “treatment based on pattern differentiation, addressing both root and branch”, aiming to achieve the therapeutic goal of “regulated Heart-Spirit, harmonized Qi-Blood, and consolidated exterior” through appropriate herb combinations^[24,25].

Tranquilizing the heart and calming the mind to soothe the heart-spirit

In clinical practice, heavy sedative herbs and nourishing Heart-Spirit herbs are often combined to calm the agitated Heart-Spirit and interrupt the vicious cycle of “pruritus-Heart-Spirit disturbance.”

Heavy Sedative Herbs: Commonly used are *Os Draconis* (Long Gu), *Concha Ostreae* (Mu Li), and *Concha*

Margaritifera (Zhen Zhu Mu). These heavy, sinking herbs primarily enter the Heart and Liver meridians, with salty, astringent, and cold properties. *Os Draconis* excels at heavy sedation and dampness absorption for sores. *Concha Ostreae* is skilled in tranquilizing and softening hard masses. Together, they regulate both Yin and Yang through sedation and sinking. *Concha Margaritifera* assists by calming the Mind and pacifying Liver-Yang, creating a synergistic effect.

Nourishing Heart-Spirit Herbs: Representative herbs include *Semen Ziziphi Spinosae* (Suan Zao Ren), *Poria cum Radix Pini* (Fu Shen), and *Cortex Albiziae* (He Huan Pi). *Semen Ziziphi Spinosae* nourishes Yin and Blood to calm the Mind. *Poria cum Radix Pini* tranquilizes the Heart-Spirit, fortifies the Spleen, and promotes diuresis to drain Dampness. *Cortex Albiziae* relieves depression, calms the Mind, and activates Blood. The combination of heavy sedation and nourishment creates a synergistic approach of attacking and tonifying, collectively supporting the function of “The Heart Housing the Mind.”

Regulating qi and harmonizing blood to unblock the blood vessels

Addressing the pathogenesis of “The Heart Governs the Blood and Vessels” dysfunction and Qi-Blood stagnation, the combination follows the principles of “cooling the Blood, nourishing the Blood, dispersing Wind, and harmonizing Blood,” considering both supplementation and dispersion.

Herba Schizonepetae Carbonisata (Jing Jie Tan), originally a wind-dispersing herb for expelling rashes and relieving itching, when charred, has reduced dispersing properties and enters the Blood level. It is particularly effective at dispersing Wind, regulating Blood, healing sores, and relieving itching. *Radix Rehmanniae Praeparata* (Shu Di Huang), nourishes Blood and Yin, moisturizing the skin. It supplements the source of Blood and prevents the dispersion and consumption caused by other herbs. *Radix Paeoniae Rubra* (Chi Shao), cools the Blood, disperses stasis, clears pathological heat, unblocks the vessels, and moderates the warm and drying nature of other ingredients. These three herbs, combined to balance supplementation and dispersion, cold and warm, work synergistically to regulate Qi and Blood, ensure smooth circulation in the vessels, directly target

the dysfunction of “The Heart Governs the Blood and Vessels” and Qi-Blood stagnation, and improve AD symptoms. *Fructus Jujubae* (Da Zao), fortifies the Middle Jiao and harmonizes the effects of other herbs, preventing damage from cold and cool substances.

Dispersing wind and astringing yang to consolidate the exterior

Aiming at the pathogenesis of “The Heart Manifests at the Exterior” dysfunction and Nutritive-Defensive (Ying-Wei) disharmony, the herb combination uses “dispersing and astringing in combination” to regulate the opening and closing of the interstitial space^[26]. *Radix Saposhnikoviae* (Fang Feng), and *Radix Ephedrae* (Ma Huang Gen), are used together. *Radix Saposhnikoviae* disperses Wind, consolidates the exterior, and relieves itching. *Radix Ephedrae* astringes floating Yang, consolidates the exterior, and stops sweating. Together, one disperses and one astringes, regulating the interstitial space. *Radix Angelicae Sinensis* (Dang Gui), sweet, warm, and moist, nourishes Blood, harmonizes the Nutritive level, activates Blood, and unblocks the collaterals. It supplements the deficiency of Nutritive-Blood to strengthen the foundation of the exterior, and promotes Blood circulation to aid the dispersion of Wind. These three herbs work synergistically: *Radix Saposhnikoviae* disperses exterior pathogens without consuming Nutritive-Blood, relying on *Radix Angelicae Sinensis* to nourish Blood and secure the healthy Qi. *Radix Ephedrae* astringes floating Yang without stagnating Qi, assisted by *Radix Saposhnikoviae*'s dispersing nature to facilitate the opening and closing of the interstitial space. *Radix Angelicae Sinensis* harmonizes the Nutritive level and activates Blood, which can enhance *Radix Saposhnikoviae*'s wind-dispersing effect and counteract the excessive astringency of *Radix Ephedrae*. Together, they achieve the effect of dispersing Wind, astringing Yang, and consolidating the defensive exterior, improving symptoms like pruritus and spontaneous sweating in AD caused by Nutritive-Defensive disharmony and unconsolidated interstitial space.

Clearing the heart and cooling the blood to drain heart-fire

Targeting the pathogenesis of hyperactive Heart-Fire flaring along the meridians to the skin, the combination

follows the principle of “clearing the Heart and draining Fire, guiding heat outward.”

Flos Lonicerae Japonicae (Jin Yin Hua) and *Fructus Forsythiae* (Lian Qiao) are used together. Their light, clear quality makes them skilled at clearing the Heart and draining Fire, and penetrating heat outward. *Radix et Rhizoma Rubiae* (Qian Cao) cools the Blood and activates Blood, preventing Blood-Heat from causing stasis. *Herba Lophatheri* (Dan Zhu Ye) and *Herba Plantaginis* (Che Qian Cao), sweet and bland, promote diuresis, guiding Heart-Heat downward to be expelled via urine. Together, they clear the Heart, cool the Blood, eliminate pathogens, and secure healthy Qi.

Clinical modification based on pattern differentiation

The disease course and constitutional differences in AD lead to evolving pathogenesis. Clinical practice must follow the principle of “the method changes with the pattern, and herbs change with the presentation,” allowing flexible modifications based on the core “Tranquilizing the Heart and Calming the Mind” therapy to achieve personalized treatment.

Acute exacerbation stage: The pathogenesis primarily involves “hyperactivity of Heart-Fire, mixed with Dampness-Heat,” manifesting as erythema, burning, itching, and exudation. Treatment should urgently clear heat and rapidly drain Dampness. *Gypsum Fibrosum* (Sheng Shi Gao) and *Radix Scutellariae* (Huang Qin) are often added to directly reduce the intensity of Qi-level and Upper Jiao fire. These are combined with *Cutis Poriae* (Fu Ling Pi) and *Rhizoma Alismatis* (Ze Xie), which specifically target water-dampness in the skin and guide pathogens downward, aiming to quickly control the branch manifestations of Dampness-Heat-Fire toxin.

Chronic persistent stage: The core pathogenesis shifts to “Blood-Deficiency with Wind-Dryness, Blood-Stasis obstructing the collaterals,” presenting as dry skin, itching, and lichenification. The treatment strategy should shift from “clearing and draining excess pathogens” to “harmonizing the Nutritive and Blood.” *Fructus Kochiae* (Di Fu Zi), bitter and cold, descends and drains, enters the Blood level, dispels Wind to relieve itching, and promotes diuresis to moisten dryness, alleviating dry

itching of the skin. *Radix Scrophulariae* (Xuan Shen), sweet, bitter, and slightly cold, nourishes Yin, enriches Blood, cools Blood, and disperses stasis. It both supplements the deficiency of Yin-Blood to moisturize the skin and unblocks stasis in the collaterals to aid repair. *Radix Angelicae Sinensis* (Dang Gui) and *Radix Paeoniae Rubra* (Chi Shao) can be added to nourish Blood and activate Blood simultaneously. For intractable pruritus and thickened lesions, herbs like *Zaocys* (Wu Shao She) and *Scorpio* (Quan Xie) may be employed. These insect-based herbs penetrate the Yin-level blood vessels and collaterals to “search out and extinguish Wind and unblock the collaterals,” breaking deep-seated obstructions.

For patterns of “Heart-Kidney Disharmony”: due to congenital insufficiency in children or consumption from prolonged illness, manifesting as restlessness, insomnia, and dull skin lesions, it is necessary to warm and moisten the Kidney to secure the root^[27]. *Rhizoma Drynariae* (Gu Sui Bu) and *Radix Rehmanniae Praeparata* (Shu Di Huang) can be added in moderation. Shu Di Huang, sweet, warm, and thick, enriches Kidney-Yin, nourishes Blood, and replenishes essence. It supplements the consumption of Yin-Blood from chronic illness to moisturize the skin and replenishes the source of Kidney-Water to help it ascend and control Heart-Fire. *Rhizoma Drynariae*, bitter, warm, and drying, warms Kidney-Yang, activates Blood, and promotes tissue regeneration. It strengthens Kidney-Yang Qi to secure the root and unblocks Blood vessels to aid lesion repair. Used together, *Radix Rehmanniae Praeparata* nourishes Yin and Blood for “supplementation,” while *Rhizoma Drynariae* warms Yang and activates Blood for “unblocking.” They supplement without causing stagnation, warm without causing dryness, jointly assisting Kidney-Water in ascending to control Heart-Fire, achieving the effect of “conducting fire back to its origin.” This calms the Heart-Spirit and nourishes the skin, fulfilling the role of “warming the Kidney to secure the root, nourishing Blood to moisten the skin.”

Remission stage of AD: Characterized by susceptibility to relapse and prolonged course, the core pathogenesis is closely related to Spleen and Kidney deficiency. Treatment should fortify the Spleen and tonify the Kidney.

Rhizoma Atractylodis Macrocephalae (Bai Zhu), sweet

and warm, boosts Qi, fortifies the Spleen, and dries Dampness. It nourishes the acquired foundation to promote the generation of Qi and Blood, improving skin dryness due to malnourishment, and protects the Spleen and Stomach to reduce potential side effects from other cold-cool herbs. *Rhizoma Drynariae* (Gu Sui Bu), bitter and warm, tonifies the Kidney and activates Blood. It warms the congenital Yang to secure the root and unblocks Blood vessels to aid lesion repair. These two herbs cooperate, *Rhizoma Atractylodis Macrocephalae* fortifies the Spleen to nourish the acquired basis and replenish Qi and Blood; *Rhizoma Drynariae* tonifies the Kidney to strengthen the congenital basis and enhance function. Together, they achieve the effect of tonifying both the acquired and congenital foundations, securing healthy Qi, fundamentally enhancing the body's ability to resist pathogens, reducing disease recurrence, and enabling effective management of long-course AD.

Outlook

In conclusion, this study provides a systematic validation that the “Tranquilizing the Heart and Calming the Mind” therapy represents a psychosomatic therapeutic system characterized by comprehensiveness, logical consistency, and clinical operability. Rooted deeply in the ancient yet profoundly insightful theories of TCM, this therapy has also had its efficacy increasingly validated by extensive modern clinical observations. Its paramount value and considerable potential lie in its ability to directly target the core psychosomatic comorbidity of atopic dermatitis by regulating the dysregulated brain-skin axis, thereby providing a viable strategy for effectively breaking the vicious itch-scratch cycle and alleviating the associated anxiety and sleep disturbances, and substantially improving patients' quality of life as a result. Therefore, we strongly advocate for future interdisciplinary research that integrates the fields of dermatology, neuroscience, immunology, and psychology collaboratively. The application of modern scientific methodologies, ranging from rigorous randomized controlled trials to sophisticated mechanistic studies, is crucial for the empirical validation, mechanistic elucidation, and innovative advancement of this valuable therapeutic approach. Such endeavors are indispensable for facilitating its rational integration into global, patient-centered AD care strategies, ultimately offering hope and improved clinical outcomes for AD

patients worldwide.

Author Contributions

Jie Ma: Data curation, writing-original draft. **Mingjing Li:** investigation. **Hui Gao:** investigation. **Huan Li:** formal analysis. **Yiding Zhao:** methodology. **Yanli Song:** validation. **Jingjing Wang:** visualization. **Na Lang:** Resources. **Ping Song:** methodology. **Yaozhou Huang:** Conceptualization, funding acquisition. **Huiyan Chi:** Conceptualization; funding acquisition; visualization; writing—review and editing.

Conflicts of interest

The authors declare no conflicts of interest.

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