

# Application Experience and Thinking of Acupuncture-picking Therapy in Differentiating and Treating Pain Symptoms

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**Abstract:** Acupuncture-picking therapy is widely used in the treatment of pain, but its therapeutic effect is still unclear. Based on the TCM meridians and collaterals theories such as "Yu Chen Chu Zhi" and "pain as acupuncture point", this paper discusses the mechanism of acupuncture-picking therapy in the differentiation and treatment of pain from the aspects of syndrome differentiation, therapeutic mechanism, prescription basis and action mechanism. At the same time, the problems existing in the clinical practice and research of acupuncture-picking therapy in the treatment of pain are sorted out and thought, which is convenient for clinical application and further research.

**Keywords:** acupuncture-picking therapy; pain symptoms; pain as acupuncture point; acupoint sensitization

## 1. Introduction

Acupuncture-picking therapy is based on the principle of Chinese medicine's Zang and meridians and uses the guidance of certain body parts to prick diseased areas of the body using the "sharp acupuncture" and "half prick" techniques that date back thousands of years. The "Ling Shu - Official Acupuncture" stated that "the disease in the meridian chronic paralysis, take the sharp acupuncture..... disease in the Five Zang solid residence, take the sharp acupuncture", and that "half prick, shallow and fast out of the skin, no hurt the flesh, such as Plucking hair"<sup>[1-3]</sup> are examples of diseases that require the use of sharp acupuncture. Its lengthy development history, as well as other nicknames like "pick grass seed" and "pick Sha poison"<sup>[4]</sup>. Acupuncture-picking therapy has different schools in China, but its core is to select the relevant reaction points or acupoints on the body surface according to the patient's disease, and use different acupuncture and methods to pick the superficial skin reaction points or pick out the subcutaneous fibers as a kind of simple therapy, and then cupping can be used to make the stasis of blood discharged, so as to expel stasis of poisonous evils, and at the same time, through the strong stimulation of the skin by acupuncture, to stimulate the positive qi of the human body, in order to alleviate the symptoms of the patient and improve the quality of life. At the same time, through the strong stimulation of the skin by acupuncture, the body's positive energy will be stimulated, so as to achieve the purpose of alleviating the patient's symptoms and improving the quality of life. There are many clinical uses for acupuncture-picking therapy, including the treatment of external gynecological and pediatric diseases like haemorrhoids, acne, dysmenorrhea, and paediatric chilblains as well as common internal diseases like woolly boils, stomach pain, abdominal pain, asthma, breast addiction, colds, etc<sup>[5-12]</sup>. For example, vascular neuralgia headache, occipital neuralgia, trigeminal neuralgia, cervical spondylosis, frozen shoulder, lumbar muscle strain, sciatica, knee, elbow, wrist, or ankle sprains, gastric and epigastric pains, cholecystitis, menstrual cramps, gout, and postherpetic neuralgia all have notable clinical efficacy<sup>[13-16]</sup>, as shown in Table 1 and Figure 1. The human body is connected to the meridians, picking treatment can stimulate blood, so that organs and organs, limbs, and bones function to enhance the body's function back to normal, to achieve the effect of replenishing the deficiency. Acupuncture-picking therapy is through the stimulation of the body's superficial skin and flesh to stimulate the meridians and blood, dredge the meridians, balance the yin and yang, regulate the function of internal organs and tissues. The following discussion of the practical application of the team's expertise is based on the team's years of clinical experience using acupuncture-picking therapy to treat pain and a review of the literature.

Table 1: Treatment characteristics of Acupuncture-picking therapy

Characteristics	Advantages
Safety	Acupuncture-picking therapy is a shallow needling method, which has stimulation points throughout the body, but the depth of the pricking is limited to the skin and does not exceed the subcutaneous fascia layer, making it very safe and without any side effects
Tools	The tools used are very simple, and any round needle, sewing needle, stainless steel small awl with strong hardness, as well as various special needle tools (peak hook acupuncture, filiform acupuncture, round sharp acupuncture, and syringe acupuncture) can be use
Technique	Stimulation techniques mainly involve horizontal pricking, pulling, and swaying, or picking out some white fibrous substances in the cortex (which are the root of the disease, blocking the meridians and causing stagnation of qi and blood, leading to the proliferation of diseases; while healthy people do not have it, and bleeding occurs when picked), one by one, until all are picked out. The wound is very small and quickly heals
Point selection	As for the method of acupoint selection, in addition to the same method as that of acupuncture and moxibustion, it is also emphasized to select the pathological positive reactant "skin spots" of the skin as the center of the pricking treatment
Indication	It has a wide range of indications and can cure many internal and external diseases without recurrence



Figure 1: Acupuncture-picking therapy for treating hemorrhoids and wool boils

## 2. Selection criteria for acupoints: Yu Chen Chu Zhi

The "Ling Shu - sea theory" stated that "the twelve meridians, internal belongs to the internal Zang Fu, outside the joints in the limbs," and that "the meridians are the human body to run Qi and blood, contact internal Zang Fu, communication inside and outside, through the upper and lower pathways." Pain is the general term for pain as the clinical manifestations of the disease. Meridian blockage, which results in discomfort in the internal Zang Fu or limbs, is not brought on by the smooth flow of blood and Qi. The relationship between skin and Wei Qi theory and acupuncture-picking therapy is very close. According to The "Su wen - skin" of the theory, "where the twelve meridians and veins, the Department of skin is also" , "the skin of the Department of the pulse is also" and "the skin of the Department of the meridians for the discipline" The skin not only reflects the functional meridians' activity on the body's surface but also the distribution of the collaterals' area's Qi .The "Ling Shu - Zang" remarked: "Wei Qi and the flesh of the relief, the skin is soft, the coupling is dense carry forward. Wei Qi can warm the flesh, full skin, fat coupling, the Division of the opening and closing of the person also." "Yu" implies stagnation and stillness through "depression, stasis," and "Chen" denotes a considerable amount of time. These relevant body parts in the emergence of pathological reactions at the site are known as the disease reaction point (also known as the acupuncture picking point). When the human body is in a disease state marked by meridian stagnation, or even stagnation of Qi and blood stasis or phlegm and stasis blockage, the surface of the relevant body parts will exhibit relatively specific pathological reactions, such as pain, sensitivity, pimples, striae, etc.The "Ling Shu - meridian" said "Yu Chen Chu Zhi", acupuncture-picking therapy originates from the ancient "nine acupuncture" of the sharp acupuncture therapy, the disease in

the meridian chronic paralysis, through the "acupuncture picking points." After the "acupuncture picking point" line prick, one might get rid of Yu Chen fan relief pain through the meridians, which regulate the internal Zang Fu. As the "Su Wen - Five Zang theory" put it: "Pingzhi in the right balance, go aster Chen chop straw, micro-movement of the four extremes, warm clothes, mu pricked its place, to restore its shape." According to Su Wen, the theory of formation of the five viscera, the basic mechanism of pain is "not through the pain," and the skin "Wei Qi's stay stop, the guest of the evil also, the edge of the needle and stone and go." The skin contributes to the functioning of Wei Qi and plays a part in it. Stimulating the skin can also control how well Wei Qi works [17]. As a result, the needle picking therapy works by stimulating the skin's positive response sites to control internal organs and internal organs, pass Ying wei qi, and flow blood to fulfill the function of "through is not painful" [18]. Acupuncture-picking therapy under the guidance of the principle of Yu Chen Chu Zhi, mainly for the real evil and set up, belongs to the diarrhea, mostly associated with bloodletting therapy, but not limited to the fingertip bloodletting or piercing and cupping, this therapy emphasizes the picking off the subcutaneous muscle fibers, but at the same time, we should also pay attention to the use of the frail people with caution in order not to injure the positive Qi.

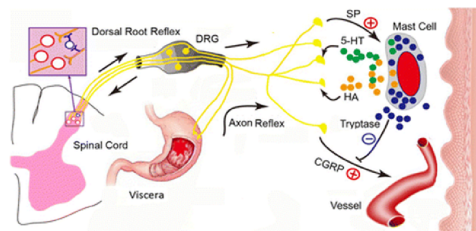
### 3. Basis of the formula: take pain as an acupuncture point

Identification of the meridian acupuncture points and "pain for the acupoint" acupuncture points are the two divisions of needle picking therapy used to alleviate pain. Identification of acupuncture points, also called "meridian acupuncture points", selected and disease-related organs and meridians of specific points, the use of internal organs, meridian identification, clear belonging to the internal organs and meridians, more than the dorsal yu points, spinal acupuncture points, mainly with the disease near the Department of the (before and after) has the corresponding role of the main treatment of meridian acupuncture points. The "pain for the acupuncture" and "positive reaction needle picking point" acupuncture sites are both located in the illness position to locate the most visible pressure point. This phenomenon is known as "acupoint sensitization", of which sensitization of pain and the "Huangdi Neijing" are two examples. Modern medical research demonstrates that when the body is in a pathological state, the relevant parts of the body surface will produce morphological and/or functional changes in various forms, such as local rashes, nodules, and other changes and local sensory sensitization. Ling Shu - Back Acupuncture Points (-), which says: "If you want to get it and test it, press it, and the pain will be relieved in the middle of the body, which is the acupoint," is compatible with the idea of "pain as loss" in Huangdi Neijing. The positioning of acupuncture points is emphasized by the phrases "press its place," "should be in the middle and pain relief, is also its acupuncture point," and "speculation point." the method of A is, that people have disease and pain, that is, make pinch on it; if the fruit when its place, do not ask holes, that is, to get comfort or pain, that is, the cloud is, moxibustion and stabbing all the experience is also called A is the acupoints. The most accurate representation of the idea of the original meaning of the acupoint, as well as the point sensitization condition of the body surface performance, according to contemporary researchers, is A, the point without alteration and evolution of the "pain for the acupoint" [19]. "Ling Shu - nine acupuncture twelve original " said: "The said section, the procession of God's gas in and out also", sensitized state of the acupuncture point is not only a reaction to the disease's window, but also to needle picking therapy and other traditional Chinese medicine external therapeutic method of treatment of disease "trigger"(Figure 2). Acupuncture-picking therapy emphasizes that we pay attention to the patient as a whole based on not ignoring the acupoints, the role of the proximal treatment of the Acupuncture Points, do not ignore the importance of local acupuncture points, many of the symptoms of meridian tendon disease pain-based, so the use of the "pain for the Acupuncture Points" of the therapeutic ideas, you can achieve unexpected therapeutic effects.

Shape change point	The Subcutaneous tissue and muscle have strip like and nodular changes, skin rash, superficial vascular changes, color changes, etc
Function change points	Sensitization points of acupoint pressure (tenderness), low resistance points, skin temperature changes, thermal sensitivity points, etc

Figure 2: Sensitization point

#### 4. Mechanism of action: Multi-target regulation



The afferents from the viscera activate spinal neurons in a clockwise direction through dorsal root ganglion cells and transmit them in a reverse direction to the peripheral nerve endings. On the one hand, the impulses that are transmitted in a clockwise direction to the dorsal horn of the spinal cord act on another dorsal root neuron through the intermediate neurons of the microcircuit (shown in the box), and are transmitted back to the periphery in the form of dorsal root reflexes; On the other hand, visceral inputs are transmitted to the periphery in the form of axon reflex at the branches of dorsal root ganglion cells. These two types of impulses transmitted in the opposite direction to the periphery both promote the release of inflammatory substances such as SP and CGRP from nerve endings, causing local vasodilation and plasma albumin extravasation; SP further stimulates mast cells to release pain causing substances such as HA and 5-HT, causing sensitization of acupoints.

Figure 3: Schematic diagram of acupoint sensitization

It has been demonstrated that acupoint sensitization serves as the "on" switch for the development of "self-healing power" or "homeostatic regulation" in the course of biological evolution<sup>[20]</sup>, which is the transformation of the mechanism from resting state to sensitized state in pathological states. This mechanism may be connected to the mechanisms of neurogenic involved pain, instinctive and non-specific broad-spectrum homeostatic regulatory cascade responses, and sympathetic-sensory coupling. Other pathways include sympathetic-sensory coupling, non-specific broad-spectrum homeostatic regulatory cascade responses and others, example of acupoint sensitization serves mechanisms is shown in Figure 3. The process of needle picking therapy can be summed up as "stabbing, picking, moving, out, applying" and other operational principles: both in the routine disinfection of the needle into the needle picking point parts of the skin horizontally, picking through the skin, deep into the subcutaneous 2-3mm, the application of the needle picking therapy to the skin. The needle and the needle picking point portions of the skin perpendicularly to perform light lifting motions in either the up or down or left or right directions, among other operations, or to remove the subcutaneous white fibrous tissues. The maximum depth of picking should not go deeper than the subcutaneous fascia layer and is typically 2 to 3 mm deep. The primary stimulation method in needle picking therapy is picking and lifting, tugging, and swinging. The operation procedure also includes extensive stimulation by needling, massaging, stabbing blood, and peeling and loosening of needles and knives. In reality, it is a mechanical physical stimulation of acupoints in the body's skin area that has been sensitized. It may be connected to the stimulation of C-multiple injury receptors and the change of the local skin microenvironment in the sensitized area. The C-polymodal nociceptor (CPN), whose cytosol is found in the dorsal root ganglion or trigeminal ganglion, has been shown in studies to be the most widely distributed type of nociceptor in the skin<sup>[21]</sup>. When activated by external stimuli, the C-polymodal nociceptor can experience sensitization phenomenon, which is characterized by a decrease in the activation threshold and an increase in excitability. In order to mobilize and activate the body's immune function as well as to energize and stimulate the body's own endogenous regulatory system, needle picking therapy uses picking, pulling, swinging, and other stimulation modes on these sensitive acupoints. Additionally, research has indicated a possible connection between the local production of skin flora and the painful symptoms of acupoint sensitization. In the localized skin sensitized under pathological conditions, changes in skin microecology, such as changes in permeability or increased contact with microbial populations, upregulate the expression of neuroimmune substances, leading to abnormalities in intrinsic immunity and inducing adaptive immune responses, which induce a local inflammatory response and cause pain<sup>[22]</sup>. Bacteria cause pain through immune or inflammatory signaling pathways. The blood-stabbing effect, massage, and needle-knife effect, which can be achieved by stimulating the nerve endings and the nerve conduction function, relieving spastic blood vessels to promote local microcirculation, are all possible mechanisms of action for needle picking therapy for the treatment of pain. Improving local nutrition, encouraging the metabolism and regeneration of tissues, releasing local adhesions to reduce muscle spasm, and boosting the metabolism and immunological activities of localized skin, regulating the analgesic effect while playing to several targets.

## 5. Shortcomings and Reflections

The author believes that the deficiencies of clinical practice and research on acupuncture-picking therapy for pain symptoms are mostly expressed in the following three elements, which are based on the research foundation of the project team and the current research state.

Acupuncture-picking therapy for pain symptoms has a low degree of clinical evidence, and at the moment, the literature that has been consulted consists primarily of clinical observations and case reports, with a small sample size, a quick research cycle, and poor research quality. Furthermore, the clinical study's randomized control design was illogical. Lacking consistent, established control standards and robust evidence-based medication, the control group primarily employed *Tripterygium wilfordii* polyglycoside tablets, Ibuprofen tablets, Diclofenac sodium double release enteric coated capsules, methotrexate, and other analgesic and anti-inflammatory treatments. The use of acupuncture-picking therapy is straightforward, highly reproducible in clinical settings, substantial in clinical care, long-lastingly effective, and economical. A conventional, big sample, multicenter, randomized controlled clinical research must be established because the existing therapy mechanism is not entirely known.

The clinical efficacy evaluation criteria are unreliable. The current evaluation criteria for clinical efficacy in clinical research frequently refer to the "Diagnostic Efficacy Standards for Traditional Chinese Medicine", "Clinical Disease Diagnosis Criteria for Cure and Improvement", "Guiding Principles for Clinical Research of New Chinese Medicines", etc. and frequently use pain visual simulation scales, dysfunction questionnaires, traditional Chinese medicine syndrome scores, MPQ scales, and functional activity scoring scales. The research data lacks objectivity and is not consistent. Based on the many characteristics of pain stimuli, pain threshold can be used as one of the methods and standards for measuring pain. It can be used to identify mechanical, thermal, ischemic, chemical, electrical stimulation, and other types of pain thresholds. It benefits from non-invasive safety and unbiased controllability.

Acupuncture and operating procedures still need to be enhanced. While some contemporary researchers employ peak hook acupuncture, filiform acupuncture, round sharp acupuncture, and syringe acupuncture for operation, traditional acupuncture-picking therapy frequently uses triangular acupuncture. In contrast, plucking is frequently done with sewing needles in folklore. The development of needle picking therapy is also hampered by the inconsistent use of acupuncture, standardized operating procedures, and evident intraoperative pain. As a result, creating a new kind of acupuncture-picking instrument that is simple to use, secure, and standardized, as well as raising the bar for how acupuncture-picking therapy is administered, is a prerequisite for promoting the practice.

## 6. Summary

Acupuncture-pricking therapy is an external treatment method condensed from the clinical practice of ancient Chinese people, with good development prospects. Through previous studies, it is suggested that future researchers can use a variety of new acupuncture, drugs, larger sample size, or multi center Randomized controlled trial with more rigorous design, so as to continuously improve and develop the research of acupuncture-pricking therapy. Acupuncture-picking therapy has a lot of related literature, and a good theoretical foundation, is simple, convenient, tested and inexpensive, widely used, and is a mature therapeutic technique. Therefore, needle pick therapy is worthy of further in-depth research and popularization. It can stimulate the positive qi, pick out the knot fibers to dredge the stagnation of meridians and tunnels and drive out the toxins, which is in line with the etiology and treatment principles of various diseases, and it is necessary to further organize and summarize it; so far, the related research of acupuncture-picking therapy mainly focuses on collating the literature and summarizing the experience of folk and famous doctors, and it has achieved good results, but the related experimental research is relatively small, and it is necessary to further study it based on good clinical practice, and it is also necessary to further study it based on good clinical practice, and it is a mature treatment technique. It is necessary to conduct further in-depth research based on good clinical practice and summarize and improve it. In conclusion, acupuncture-picking therapy of Zhuang medicine is a mature technology, simple, convenient, tested, and inexpensive, which is worthy of clinical popularization and application.

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