

## Pain Relief Effect of Acupuncture and Moxibustion

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Chronic pain is defined as pain associated with a progressive noncancerous disease with pain lasting longer than expected for treatment. Pain is classified by source, nociceptive pain, neuropathic pain, psychogenic pain [1-3].

In addition to nociceptive pain, patients who complain of chronic pain due to neuropathic pain or psychogenic pain are increasing. [4, 5]

In particular, since pain generated after surgery is involved in tension and emotion of the sympathetic nerve, it is difficult to control with drugs, and the effect of acupuncture and moxibustion is expected. In this paper, the analgesic effect by acupuncture and moxibustion treatment is discussed based on new findings concerning pain.

Acupuncture and moxibustion therapy is a method of using sensations related to pain in therapy for treatment in human senses. By touching or stabbing the acupuncture with the skin, the dull nerve function is excited and excited functions are suppressed, and the body's discomfort is treated [6]. The indications for acupuncture discussed in WHO (World Health Organization) are shown below. A lot of cases in which pain is caused by

pain itself or disease are included [7].

Neurological and musculoskeletal disorders: headache and migraine, trigeminal neuralgia, early of facial paralysis, paralysis after stroke attacks, peripheral neuropathy, early of sequelae of polio, Ménière's disease, neurogenic bladder dysfunction, nocturnal enuresis, intercostal neuralgia, Cervical arm syndrome, frozen shoulder, tennis elbow, sciatica, back pain, osteoarthritis.

Upper respiratory tract: acute sinusitis, acute rhinitis, common cold, acute tonsillitis.

Respiratory system: acute bronchitis, bronchial asthma.

Eye disorders: acute conjunctivitis, central retinitis, childhood myopia, unaltered cataract.

Mouth disorders: toothache, pain after tooth extraction, gingivitis, acute and chronic pharyngitis.

Gastrointestinal disorders: esophagus and cardiac convulsions, hiccups, gastroptosis, acute and chronic gastritis, stomach hyperacidity, chronic duodenal ulcer, complication free duodenal ulcer, acute and chronic enterocolitis, acute bacterial diarrhea, constipation, diarrhea, paralytic ileus.

If acupuncture and moxibustion treatment can relieve neuropathic pain which is particularly problematic in chronic pain, it is considered to be a great gospel for the patient. With neuropathic pain, rewriting of the body part regeneration map is performed, and further pain is caused. Conversely, by increasing the input from the nerve, the body part reproduction map can be rewritten and the pain can be suppressed. If you actively increase the nerve input from the part that feels pain, you can also relieve chronic pain by rewriting the body part reconstruction map. Acupuncture stimulation, electroacupuncture stimulation, scraping acupuncture, childhood acupuncture excite the receptor present in the skin and increase the neural input. As a result, there is a possibility that pain is suppressed by rewriting the body part reconstruction map relating to pain with a stimulus that does not feel pain. Since analgesics are not always effective for everyone, it is expected that combining an analgesic with acupuncture will improve the effect.

Cases of patients diagnosed with complex regional pain syndrome (CRPS) have been reported [8]. A 69-year-old woman. The main complaint is pain around the right ear. There was tinnitus hearing loss. She consulted an otorhinology. Vitamins and vasodilators were prescribed because of unknown cause. The symptoms improved, but pain around the right auricle remained. She was transferred to another hospital and she was diagnosed as CRPS (Complex Regional Pain Syndrome). DCT (Drug Challenge Test) did not give any results. Pregabalin (Lyrica) for peripheral neuropathic pain remedy was

prescribed but it did not work. Since then the symptoms worsened, she was transferred to a university hospital. The benzodiazepine antiepileptic drug rivotril and the anti-anxiety drugs depas worked well. The visual analog scale (VAS) of the pain was reduced to one hundredth. As the medicine was reduced, it worsened, so the symptoms became lighter by increasing the medicine. After that, doctors were concerned about increasing the amount of medicine and recommended acupuncture.

She was hypersensitivity, spontaneous pain, stress, depressed tendency, and a multi-word. There is no edema or insomnia. In the HRQOL (Health Related Quality of Life) scale, the eight subscale SF-8 were generally less than 50. Especially 20 mental health (MH), vitality (VT), social life function (SF), summary score (spirit) etc. were bad. The physical function was 54, which was standard. For the purpose of stabilizing the autonomic nervous system, the needle was placed in acupuncture point of the spinal column, tension part of the multifidus muscle, acupuncture point of the abdomen for 10 minutes. Electric acupuncture 1 Hz was performed for L14 - LU6, ST36 - SP6 for 20 minutes. Acupuncture was also performed on TE5. In the first treatment, VAS became 0 immediately after the operation. Later, she felt pain, but due to weekly treatment, there were days when pain did not occur 3 or 4 days a week. Mental points improved to over 40.

This patient was diagnosed as complex regional pain syndrome CRPS, but it is doubtful whether it was really CRPS. Psychogenic effects are also conceivable.

Currently, the pain is totally taken, she continues treatment once a week for systemic adjustment.

The situation of acupuncture and moxibustion treatment in Japan has also been reported [8]. The first place of the causative disease of chronic pain is low back pain, most of which is an exercise apparatus and orthopedic disease. The waist and shoulders are 80%. Chronic pain holders are about 10% in Japan and 20 to 30% in France, with many chronic pain holders. Musculoskeletal pain is mostly in the 30 to 50 years old age, only aging is not a problem. Chronic pain is more common in people who do not move their body like professionals than those who move their bodies. Hospital visits are 60%, and treatment at facilities other than hospitals is also about 40%. Besides the hospital, it seems that it will become an osteopathy clinic or a chiropractics clinic. Acupuncture and moxibustion clinic is about 8%. There are 40% of orthopedic surgery, and 20% of chiropractic and massage. Anesthesiology department and pain clinic are extremely few as 1%. The contents of treatment are 20% for hospitals and clinics, and about 20% for private therapies. There are 20% for medication, 30% for massage, 10% for acupuncture moxibustion.

Acupuncture and moxibustion is being incorporated into the treatment of painful patients. On the other hand, for neuropathic pain, acupuncture treatment is about 1%. About 80% of people who can not get pain or numbness complain of pain treatment. There is no satisfactory explanation, but people are 30%. There are 30% of people who did not under-

stand the pain. In the 2009 survey, 20% say that pain is relieved. As far as medical institutions are concerned, in the report of 2011, 10% of people are satisfied, 40% of people are somewhat satisfied, and they are considerably improved. Momentum exercising for orthopedic surgery Only 30% of patients with chronic pain are satisfied. Those who returned to society were 40% who improved greatly after treatment after hospitalization and 2% who improved.

Psychological factors include cognitive bias and psychosocial factors. There are psychosocial factors based on cognitive bias other than organic factors as reasons for pain chronicity. Therefore, it makes treatment difficult. It is not aimed at eliminating pain but a viewpoint other than pain, for example, what it is not possible to do, and what it is not done. For acupuncture and moxibustion therapy, evaluation and target setting from a viewpoint other than reduction of pain are important. Treatment that increases what you can do is important. As an effect of whole body exercise therapy, there are reports that pain has been alleviated by physical activity or improved by walking. There was no analgesic effect on the shoulder, but there was also a report that the motion of the knee had an analgesic effect.

Patients with low back pain have reported that they do not exercise limited to the waist but that various physical activities can reduce pain and improve mental activity [9]. Pain and physical function improved by performing comfortable walking for 10 minutes against chronic low back pain [10]. For shoulder myalgia,

there is a report that the movement on the affected side has no analgesic effect, but the motion of the knee has an analgesic effect [11]. There is a report that cognitive behavioral therapy is effective for chronic pain [12-14]. For example, the goal of acupuncture and moxibustion treatment should be to suppress insomnia improvement and irritation. It can lead to improvement of quality of life and lifestyle by relieving other complaints such as shoulder stiffness and improving appetite often appealed by chronic pain patients.

Currently, the acupuncture and moxibustion treatment does not show evidence from clinical research more than the effectiveness in animal experiments. Therefore, the acupuncturist needs to know the type and mechanism of pain and know that acupuncture and moxibustion is not effective pain. Acupuncturists need to understand the psychological thinking of chronic pain patients, deal with both cognition and behavior, and approach in a pleiotropic manner. Approaches to behavioral targets from a viewpoint other than pain are important. Acupuncturists need to treat acupuncture and moxibustion that is not bound by pain alone.

Considering from the above results. In acupuncture and moxibustion therapy, it aims at mitigating general symptoms. Therefore, the acupuncturist can directly work on the sympathetic nerve and emotion. By analyzing the relationship between acupuncture and moxibustion treatment and chronic pain suppression based on sympathetic nerve and emotion, it is thought that treatment effect can be improved. Especially acupuncture stimula-

tion, scraping acupuncture and childhood acupuncture are thought to be able to suppress pain by exciting the receptor present in the skin, increasing the nerve input, and restoring the sense map of the cerebral cortex. There seems to be a lot of requests for treatment of numbness sensation of people with dementia, but they are not cured by surgery, and when pain disappears, there are many cases where the numbness disappears. Reasons that surgery is not being carried out on patients with dementia may be difficult to perform rehabilitation on a regular basis, and adaptation of acupuncture and moxibustion is also a future subject.

As a nerve input to rewrite the body part reproduction map, a stimulus input including image training was executed and wisdom flow. More specifically, irritation (burning, pleasing) other than pain is added. These are not acupuncture stimuli, but it seems that similar effects can be obtained by acupuncture and moxibustion therapy. When electricity is passed through acupuncture, contraction of the muscles occurs, which seems to be an effective stimulus. In acupuncture and moxibustion therapy, approaches to autonomic nerves are being made rather than Oriental medicine selection. It suppresses sympathetic tone and puts emphasis on activation of descending nerve suppression system.

Acupuncture and moxibustion therapy requires treatment of the whole body. Combined regional pain syndrome (CRPS) is not incompatible in cases with acupuncture and moxibustion effect. Because pregabalin does not work, it is not nervous. If pain increased after stopping

medicine, it is considered to have been psychogenic pain.

It is diagnosed a gall bladder meridian disease. The acupuncture points are L14, LR3. In the treatment of GB 41, it is conceivable that the parasympathetic nerve is enhanced by electric stimulation to the muscle. Temporal pain is thought to be a triple energizer meridian disease. The acupuncture points are TE1, TE2, TE3, TE4, TE6, TE10. TE 5 is easy to use, there is a possibility that it will be widely used in the future. Approach to autonomic nerve rather than oriental medical choice is also important. In order to suppress the sympathetic tone, it is considered effective to apply acupoints to acupuncture points related to descending nerve suppression system. For patients with chronic pain, it is difficult only with acupuncture and moxibustion, so cooperation between acupuncturists and doctors is important. Currently, there is no indication of evidence from clinical research for acupuncture and moxibustion treatment for chronic pain. It is necessary to know that direct stimulation to the nerve by acupuncture is not effective pain.

Acupuncturists need a pleiotropic approach that understands the psychological thinking of chronic pain patients and aims to improve the overall physical health of the patient. Especially, it is important to set behavioral targets of viewpoints other than pain. Acupuncture and moxibustion treatment not only needs pain, there is a need to improve the treatment effect with the goal of improving the general condition of the patient through adjustment of autonomic nerves and improvement of circulation of qi and

blood.

In summary, there are increasing cases of complaining of not only nociceptive pain but also chronic pain due to neuropathic pain and psychogenic pain. In the case of neuropathic pain, gene expression in dorsal root ganglion cells due to increased input from primary afferent nerve associated with nerve injury has been revealed. Anti-inflammatory drugs are used as analgesics, but recently analgesic treatment using antiepileptic drugs and antidepressants has become important. Because patients with chronic pain of nociceptive pain contain neuropathic pain, pregabalin (Lyrica) is prescribed for inhibiting pain by inhibiting pain transmission. Based on this new finding concerning pain, it is important to accumulate the evidence of analgesic effect on these pain by acupuncture and moxibustion therapy.

Acupuncture moxibustion stimulation, electroacupuncture stimulation, scraping acupuncture, childhood acupuncture excite the receptors present in the skin, increase the nerve input, and can rewrite the body part regeneration map relating to pain with a stimulation that does not feel pain. As a result, pain can be suppressed. In addition, combining an analgesic with acupuncture can also make an effect.

In acupuncture and moxibustion therapy, it is necessary to understand psychological thinking of chronic pain patients. It is necessary to keep in mind how to deal with both cognition and behavior. A pleiotropic approach to behavioral targets from a viewpoint other than pain is required. Chronic pain may be caused by decreased dopamine or decreased activ-

ity in the nucleus accumbens region of the cerebrum in the descending control system. In particular, pain that occurs after surgery is involved in sympathetic tone and emotion. Therefore, it is difficult to control with drugs, and the effect of acupuncture and moxibustion is expected. Acupuncture and moxibustion treatment needs to improve not only pain but also treatment effect by targeting improvement of patient's general condition through adjustment of autonomic nerve and improvement of qi and blood circulation.

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