

### Academic Debate

# The Comparison of trigger point acupuncture and traditional acupuncture

### 激痛点针灸与传统针灸的关系与比较

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#### ARTICLE INFO

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Accepted on March 8, 2016

#### ABSTRACT

Trigger point (TrP) acupuncture (dry needling), the use of solid filiform needles at TrPs, has been developed from a comprehensive integration and adaptation of traditional acupuncture using current understandings of TrPs. During the past twenty years, the concept and technique continues to evolve, with a potential to expand to other conditions beyond myofascial pain syndromes that can be managed via stimulating TrPs. In this article, we compared TrP acupuncture and traditional acupuncture from the following aspects: points of needle insertion, needles and needling techniques, and therapeutic indications. Traditional acupuncture encompasses an abundance of methods and techniques in acupuncture practices and has been widely used and studied for a variety of disorders. With unique specific characteristics, TrP acupuncture further develops traditional acupuncture theories, especially the concepts of Ashi point. The location of TrPs, their distribution pattern and pain indication are similar to those of traditional acupoints; the selection of needles, depth of needle insertion, and manipulation techniques are part of traditional acupuncture. TrP acupuncture is thus an integral part of traditional acupuncture.

**KEY WORDS:** trigger points; acupuncture; trigger point acupuncture; pain; myofascial pain syndrome

#### INTRODUCTION

Expert opinions collected from 1996 World Health Organization (WHO) Consultation on Acupuncture in Cervia, Italy stated that: acupuncture literally means to puncture with a needle at certain points of the human body [1]. It includes traditional body needling, moxibustion, electric acupuncture (electroacupuncture), laser acupuncture (photo acupuncture), microsystem acupuncture such as ear (auricular), face, hand and scalp acupuncture, and acupressure (the application of pressure at selected

sites)[1].

Acupuncture has been used in eastern Asian countries for the management of various disorders for thousands of years. During the past 50 years, evidence from numerous randomized, controlled trials and systematic reviews and meta-analyses further confirmed the therapeutic efficacy of acupuncture in multiple prevalent diseases in the worldwide population <sup>[2]</sup>. Early in 1960s, researchers started to realize that acupuncture majorly functions via modulating the nervous system <sup>[3]</sup>. A series of



studies, pioneered by Han Ji-sheng's group from Peking University, proved that acupuncture process could signal the brain to release endorphines, a group of endogenous opioid neuropeptides acting like morphine, to manage clinical pain in various conditions [3].

In 1994, the National Institute of Health (NIH) consensus recommended that acupuncture needle should be categorized as a legal medical device for clinical practice rather than research-only device; and this opinion was approved by the Food and Drug Administration (FDA)<sup>[4]</sup>. Later in 1997, NIH organized a consensus workshop to recognize the clinical efficacy of acupuncture for some disease conditions, such as addiction, stroke rehabilitation, headache, menstrual cramps [5]. In 2012, Vickers et al [6] published a high-quality meta-analysis using original data from each trials, demonstrating that acupuncture is significantly better than sham or control interventions in pain treatment. Because of the growing patient needs, clinical benefits, and accumulated research evidences, acupuncture has become increasingly popular and widely accepted in the West of America.

Trigger point (TrP) acupuncture (dry needling), has been developed from a comprehensive integration and adaptation of traditional acupuncture using current understandings of TrPs. It particularly refers to the use of solid filiform needles at TrPs. TrP is defined as local, hyperirritable spot in skeletal muscles, which could give rise to characteristics of referred pain, autonomic nerve transmission, or proprioception dysfunction [7]. The formation of TrP is usually associated with visceral pain, nerve root pain or simply myofascial pain [7]. Because of its conveniences in application, instant clinical efficacy, and superiority over conventional treatments for chronic pain<sup>[6,8]</sup>, TrP acupuncture has been popularized in managing myofascial pain syndrome, a condition characterized by chronic pain in multiple myofascial TrPs ("knots") and fascial constrictions. After adopting different names among conventional medicine practitioners, the concept and technique continues to evolve, with a potential to expand to other conditions that can be managed via stimulating TrPs [9].

Clinicians in the modern biomedical field are reluctant to accept and sometimes reject the prescientific notions of naturalistic theories including *yin-yang*, five elements, meridians and even acupoints in traditional acupuncture <sup>[2]</sup>. Thus, the exact name of the needling procedures may vary depending on the medical profession practicing it, but the techniques

of TrP acupuncture has garnered extreme popularity in the United States and the rest of the world during the past two decades [10]. Nonetheless, clinicians and patients who are unfamiliar with the development and practice of modern acupuncture remain puzzled about the similarities and differences between TrP acupuncture and traditional acupuncture. In this article, we aimed to compare these two types of acupuncture from the following aspects: points of needle insertion, needle selections and needling techniques, and therapeutic indications.

### LOCATION OF POINTS, DISTRIBUTION PATTERN, AND PAIN INDICATION

# The location of traditional acupoint and trigger points

Unlike acupoints in traditional acupuncture, needles of TrP acupuncture are mainly inserted at TrPs which share great similarities with traditional acupoints[11-12]. The book Myofascial Pain and Dysfunction: the TrP Manual has been considered as the bible of TrP therapies including TrP acupuncture<sup>[7]</sup>. Inside this manual, Simons and Travell documented 255 TrPs distributed across 147 muscles on the human body [7]. These TrPs are usually tender points with a surface area less than 1 cm<sup>2</sup> on skeletal muscles, and their exact locations could vary upon individuals <sup>[7]</sup>. Compared to 361 meridian acupoints well documented in classics of acupuncture, the 255 TrP accounts for around two thirds of the number of traditional acupoints. Early in 1977, Melzack and colleagues [11] compared the locations, indications of pain management and transmission paths of TrPs and traditional acupoints and revealed a similarity of 71% between these two types of points. Later, Dosher [12] used an anatomy software to map the 255 TrPs and compared them with the 747 traditional acupoints on or off meridians, and found that 92% TrPs anatomically overlap with traditional acupoints.

### Distribution of traditional acupoints, *Ashi* points and trigger points

Besides the same anatomic locations and clinical effects shared by traditional acupoints and TrPs in the management of pain, TrPs also share similar distribution patterns with traditional acupoints. TrPs are usually located at the center of muscle bellies, muscle-tendon junctions, and locations of muscle insertions at bones<sup>[9]</sup>. Each muscle of the human body can have its own specific pain patterns and sensation transmission with pressure at TrPs. Locations of traditional acupoints usually involves tendon attachment regions or joint areas close to



muscle-tendon junctions with scarce distribution at muscle bellies<sup>[13]</sup>. The size of a muscle does not share a positive relationship with the number of traditional acupoints. Besides the center of muscle bellies, the distribution of traditional acupoints is scarce at large muscles which are usually major muscles on arm, thigh, and the lower leg.

On top of the similar distribution pattern of TrPs and traditional acupoints, TrPs in TrP acupuncture can be considered as acupuncture at Ashi points, a special category of traditional acupoints. TrPs are characterized by palpable high-tension of muscle fibers with potential tenderness during local examination<sup>[9]</sup>. Pressing on the tender points on the muscles could reproduce or relieve the symptom of pain. The concept of Ashi point was first recorded in a classical Chinese Medicine book Bèijí Qiānjīn Yàofāng (《备急千 金要方》Important Formulas Worth a Thousand Gold Pieces for Emergency)[14], from Tang Dynasty (618-907AD), it states: "Moxibustion is popular in Southwestern China. There is a method known as Ashi method which involves holding a burning moxa cone over painful spots regardless of location, not necessary acupoints. Patients usually reports 'Ashi (yes, it is that point)' right after Ashi method treatments. The statement of Ashi by patients indicate disappearance of these painful spots. Thus, these painful spots are known as Ashi points". Apparently, traditional acupuncture practitioners named this type of hyperirritable acupoints without a pre-defined location "Ashi points".

# Traditional acupoints and trigger points in pain management

In terms of pain management, 79.5% of traditional acupoints are well-documented and known for the management of local pain which is more widely known as TrPs<sup>[12]</sup>. TrP acupuncture is currently mainly used for myofascial pain syndrome which is only a small fraction of indications of traditional acupuncture. Birch [15] and Hong [16] both believe that TrPs are extremely similar to if not the same as Ashi points, a group of special reactive points in traditional acupuncture. In fact, according to textbooks or classics of traditional acupuncture, almost all acupoints have local and distal indications regarding their clinical application [13,17]. Local indications of traditional acupuncture undoubtedly include local pain upon pressure, which is also known as local, hyperirritable spot in skeletal muscles or TrPs [13,17]. With the increased understandings of acupuncture and increased popularity among conventional medicine practitioners, the use of TrP acupuncture will likely to

be expanded to treat other disorders which have been proven effective using traditional acupuncture [9].

#### NEEDLE AND NEEDLING TECHNIQUES

#### The choice of needles

The choice of needles mostly follows the practitioners' personal style and skill. In TrP acupuncture, a relative large size needle could produce more informative sensation feedback to the operating fingers of the practitioner and better therapeutic effects on patients. The informative sensation feedback helps practitioners understand the type, consistency, and density of the tissues during the needle insertion. The needle needs to be long enough to reach the TrP in muscle nodules [7,9,16]. Currently, solid filiform needles are used in both TrP and traditional acupuncture. For TrP acupuncture, 22-24 gauge solid needles with a length of 40 mm needles are usually good choices for the majority of superficial muscles [18]. Additionally, 28 or even 30 gauge solid needle could also be considered when treating pain-sensitive patients. In general, the needle best for TrP acupuncture is thicker than traditional acupuncture needle, which could cause pain or uncomfortable feelings lasting for 24 hours to 2 days after treatment. On the opposite, fine filiform needles have been developed in traditional acupuncture to reduce pain caused by the needling process. The solid filiform needles commonly used by traditional acupuncturist ranges from 28 to 36 gauge to minimize any iatrogenic injury, which may be superior to TrP needles [18]. Nonetheless, the exact selection of needles in both TrP and traditional acupuncture depends on the preference of practitioners, and solid filiform needles are used in both types of acupuncture [18].

#### **Needle insertion**

Although a wide range of acupuncture techniques are used in traditional acupuncture, TrP acupuncture has specific preferences in acupuncture techniques regarding direction of needle insertion<sup>[19]</sup>. Needles are expected to be inserted along the muscle fiber alignment with manipulations such as lifting and thrusting process following a similar angle<sup>[19]</sup>. These requirements of needle insertion are in consistence with previous Ashi point acupuncture needling documentations. In the monograph of Dòu Tàishī Zhēnjīng (《窦太师针经》 Master Dou's Canon of Acupuncture)" written in Yuan Dynasty (1271 AD-1368 AD), it was stated that an oblique insertion of acupuncture needle is an important component for Ashi point treatment [20]. This method is further elaborated by modern research from Prof. LU Dinghou, who demonstrated that Ashi needling with an



oblique insertion angle could provide better treatment results than perpendicular needle insertion [19].

Needling depth is another important aspect of needle insertion. In the needling of TrP acupuncture, the tip of needle has to reach and penetrate the TrPs in muscles <sup>[7,19]</sup>. However, recent studies of TrP acupuncture report that, needling at the superficial layer of TrP, rather than penetrating through them, is equally effective<sup>[21]</sup>. The superficial needling at TrPs involves a very light stimulus for the purposes of reducing pain responses and has been found to possess similar pain relieving effects as deep needling at TrPs<sup>[21]</sup>. In traditional acupuncture, the depth of needling varies according to practitioners' preference, disease condition, and specific needles selected and methods used<sup>[13,18]</sup>.

#### Dosing of needling

Acupuncturists decide the therapeutic dosing of needling using expected reactions upon needling<sup>[10,13,18]</sup>. The theory of TrP acupuncture points out that, a local twitch response (LTR) is the key for TrP acupuncture [9,21], whereas degi (qi arrival) is essential for traditional acupuncture [10,13,18]. In Biāo Yōu Fù (《标幽赋》 Song to Elucidate Mysteries) recorded in Zhēn Jiǔ Dà Chéng (《针灸大成》The Great Compendium of Acupuncture and Moxibustion)" of the Yuan Dynasty (1271 AD -1368 AD), it states, "The acupuncturist may feel as though the needle is being firmly grabbed and moving roughly when qi arrives, but only loosely grasped and moving smoothly if qi does not arrive. Deqi feels like a fish biting a hook and bobbing in the water; if qi does not arrive, the acupuncturist feels as though the needle is in a quiet empty house." Modern understandings of "deqi" in traditional acupuncture includes a composite of sensation produced by needling, local muscle twitches, propagation of sensations along the meridian and other subjective and objective changes of the human body upon needling<sup>[22]</sup>. But it is worth mentioning that Fuacupuncture, although claimed to be part of TrP, has its own special characteristic as its principles involve specific documentation of no LTR or degi is needed for therapeutic effectiveness [21].

#### **Needle manipulation**

Besides direction and depth of needle insertion, and the targeted reactions (dosing) of the human body upon needling, therapeutic effects of acupuncture also depend on manipulations of needles<sup>[18]</sup>. The needling manipulation for TrP acupuncture is relatively simple, including lifting and thrusting<sup>[9]</sup>. But, in traditional acupuncture, techniques of needle manipulation can

be far more broad and complex. On top of lifting and thrusting, simple manipulation techniques of twirling, twisting, needle handle plucking, fan-shape needling, circular needling (at the periphery of the same acupoint) are also used for degi [18]. Moreover, traditional acupuncture also contains many complex manipulations such as sky cooling and mountain burning manipulations to achieve expected therapeutic effectiveness of acupuncture<sup>[18]</sup>. Evidence shows that twisting and twirling manipulations could elicit better clinical effects than purely lifting and thrusting the needles<sup>[23]</sup>. Besides a large variety of needling manipulations, traditional acupuncture also contains the combinational use of moxibustion, electrical stimulation (electroacupuncture) and heat needling (fire acupuncture), optimized for a broader spectrum of patients with special conditions<sup>[18]</sup>. Although the development of TrP acupuncture also incorporates the use of electric stimulation, traditional acupuncture comprise of a much richer manipulation and stimulation methods.

#### **CLINICAL INDICATIONS**

### Myofascial pain and related syndromes caused by trigger points

The indication of TrP acupuncture has been traditionally limited to myofascial pain, but as stated in the aforementioned sections, the use of TrP acupuncture will likely to be expanded to treat other disorders<sup>[9,21]</sup>. Besides TrP, myofascial pain syndrome is also characterized with other signs and symptoms including sensory disturbance, muscle dysfunction, and disturbances of autonomic nervous system<sup>[24]</sup>. Thus, the following manifestations of myofascial pain syndrome are not uncommon in patients: vasoconstriction, swelling, vertigo, tinnitus, perspiration or lack of sweating, constipation, diarrhea, menstrual abnormalities, urinary changes, and pelvic pain<sup>[26]</sup>. These seemingly deep abnormalities of viscera could, in fact, be associated with TrPs<sup>[25]</sup>. With deactivation of TrPs, TrP acupuncture could well treat these conditions.

### Other internal organ dysfunctions potentially associated with trigger point complaints

Although research evidence supporting the use of TrP acupuncture for internal organ dysfunctions is still lacking, the belief and clinical experiences have its theoretical support. Besides the TrP theory as stated in the book *Myofascial pain and dysfunction: the trigger point manual* (《肌筋膜疼痛与机能障碍:激痛点手册》)<sup>[7]</sup>, Myers <sup>[26]</sup> believes that all parts of the human body including viscera are interconnected



in a myofascial web and treatments of abnormalities of the human body involves regulation of this web. The twelve myofascial meridians in Myers's theory of myofascia well match the twelve regular meridians and meridian tendons well documented in traditional acupuncture textbooks and classics<sup>[23]</sup>. The myofascial web is based on modern anatomy and physiology which shares similar foundations with TrP acupuncture. With understandings in anatomy and physiology, Myers<sup>[26]</sup> believes that TrP interventions not only treats myofascial pain, but also symptoms of internal organs.

Additional support of TrP acupuncture use in disorders of internal organs may come from clinical trials of acupuncture in the management of organ disorders[1,2,4-6] and the understandings of referred pain<sup>[27]</sup>. Referred pain usually affects cutaneous and muscle tissues of the specific dermatome. For example, angina may radiates to the pectoralis major, scapula, left shoulder and upper arm; colic from ureter stones usually radiates along the rectus abdominis and inguinal canal or even perineum and inner thigh; prostate irritation can have symptoms at the perineum and lumbosacral region or external genitalia; asthma may cause heaviness and soreness at the neck and shoulder, and reactive points at the medial boarder of the thumbs<sup>[28]</sup>. TrPs or hyperirritable spots of the muscle and cutaneous tissue are widely considered as referred pain<sup>[27]</sup>. TrPs usually share the same dermatome as the affected organs; regulation of the nervous system (which controls the organs) using therapies targeting TrPs can well likely regulate functions of these organs<sup>[7,27]</sup>. Consequently, similar to traditional acupuncture, the newly evolved TrP acupuncture can also treat disorders of internal organs on top of myofascial pain.

## Traditional acupuncture treats both muscular pain and internal dysfunctions

Traditional understandings of acupuncture (traditional acupuncture) involve needling at acupoint, a comprehensive and three-dimensional structure including skin, subcutaneous connective tissue, blood vessel, nerve, muscle, and periosteum<sup>[29]</sup>. Simulations on different tissues warrant traditional acupuncture to treat a large variety of conditions beyond myofascial syndromes. After analyzing results from over 200 clinical trials researching the effectiveness of acupuncture, WHO published a report in 2003 about acupuncture use in more than one hundred indications<sup>[1]</sup>. Clear therapeutic efficacy of acupuncture has been demonstrated in 28 conditions including nausea and vomiting, allergic rhinitis, depression, knee pain, adverse reactions to radiotherapy and/or

chemotherapy, dysmenorrhea<sup>[1]</sup>. In the same report<sup>[1]</sup>, evidence for the use of acupuncture in additional 79 disease conditions has also been summarized. During the past 13 years after the publication of the WHO analysis of clinical trials in acupuncture<sup>[1]</sup>, an additional number of acupuncture trials have published which provided additional support for acupuncture use in many conditions encompassing both musculoskeletal disorders and internal organ dysfunction.

#### **CONCLUSION**

Traditional acupuncture encompasses an abundance of methods and techniques in acupuncture practices and has been widely used and studied for treating various medical conditions. TrP acupuncture further develops traditional acupuncture theories, especially the concepts of Ashi point[30-31]. The integration and adaptation of traditional acupuncture with modern biomedical knowledge allows TrP acupuncture to understand and standardize the management of myofascial pain syndrome in a more comprehensive way, thus enriches acupuncture theories and clinic practices. The anatomical and pathophysiological foundation of TrP acupuncture reckons TrP acupuncture a subcategory of medical acupuncture, which is defined as an adaptation of traditional acupuncture using current knowledge of anatomy, physiology and pathology, and the principles of evidence-based clinical practices<sup>[32]</sup>. Nonetheless, points of needle insertion, needles and needling techniques, and therapeutic indications of TrP acupuncture are integral parts of traditional acupuncture.

#### **Conflicts of Interests:** None

#### REFERENCES

- [1] World Health Organization: Acupuncture: Review and Analysis of Reports on Controlled Clinical Trial Geneva: World Health Organization 2002.
- [2] Kaptchuk TJ. Acupuncture: theory, efficacy, and practice. Ann Intern Med 2002; 136(5): 374–383.
- [3] Research Group of Acupuncture Anesthesia, Beijing Medical Colledge. The effect of acupuncture on the human skin pain threshold. Chin Med J (Chin)1973; (58)3: 151–157.
- [4] Lao L. Acupuncture techniques and devices. J Altern Compl Med 1996; 2(1): 23–25.
- [5] NIH Consensus Conference. Acupuncture. JAMA. 1998; 280(17): 1518–1524.
- [6] Vickers AJ, Cronin AM, Maschino AC, Lewith G, MacPherson H, Foster NE, et al. Acupuncture for chronic pain: individual patient data meta-analysis. Arch Intern



- Med. 2012; 172(19): 1444-1453.
- [7] Simons DG, Travell JG, Simons LS. Myofascial pain and dysfunction: the trigger point manual, vol 1. Upper half of body, 2nd edn. North Atlantic Books; 1999.
- [8] Kietrys DM, Palombaro KM, Azzaretto E, Hubler R, Schaller B, Schlussel JM, et al. Effectiveness of dry needling for upper-quarter myofascial pain: a systematic review and meta-analysis. J Orthop Sports Phys Ther 2013; 43: 620-634.
- [9] Dunning J, Butts R, Mourad F, Young I, Flannagan S, Perreault T. Dry needling: a literature review with implications for clinical practice guidelines. Phys Ther Rev 2014; 19(4): 252–265.
- [10] Zhou K, Ma Y, Brogan MS. Dry needling versus acupuncture: the ongoing debate. Acupunct Med. 2015; 33(6): 485-490.
- [11] Melzack R, Stillwell DM, Fox EJ. Trigger points and acupuncture points for pain: correlations and implications. Pain. 1977; 3(1): 3–23
- [12] Dorsher PT. Can classical acupuncture points and trigger points be compared in the treatment of pain disorders? Birch's analysis revisited. J Altern Complement Med 2008; 14(4): 353–359.
- [13] Cheng XN. Chinese Acupuncture and Moxibustion. Beijing: Foreign Language Press; 1987.
- [14] Sun SM. BèiJí QiānJīn YàoFāng (《备急千金要方》 Important Formulas Worth a Thousand Gold Pieces for Emergency). Beijing: Liaoning Science and Technology Publishing House; 1997.
- [15] Birch S. Trigger point: acupuncture point correlations revisited. J Altern Complement Med. 2003; 9: 9(1)–103.
- [16] Hong CZ. Myofascial Trigger Points: Pathophysiology and Correlation with Acupuncture Points. Acupuncture in Medicine. 2000; 18(1); 41–47.
- [17] Chen YB. Chinese Acupuncture Therapy. Science and technology of China press; 1990: 119.
- [18] Lu SK. Acupuncture and Moxibustion Administration Methods. Beijing: China Press of Traditional Chinese Medicine; 2003.
- [19] Lu DH. Muscle injuries and pains involving back and limbs: clinical and experimental studies on acupuncture treatment of muscle injuries. TCM Press; 1999.

- [20] Gang WJ, Huang LX. Summary of the Research on Master DOU's Canon of Acupuncture. Zhen Ci Yan Jiu. 2007; 32(3): 207–209.
- [21] Dommerholt J, Mayoral del Moral O, Gröbli C. Trigger point dry needling. J Man Manipulative Ther 2006; 14(4): F70–87
- [22] Kong J, Gollub R, Huang T, Polich G, Napadow V, Hui K, et al. Acupuncture *de qi*, from qualitative history to quantitative measurement. J Altern Complement Med. 2007; 13(10): 1059–1070.
- [23] Tao XY, Zhao BY, Han X, Dong XY, Yan A, Ren XR, et al. Impacts of rotating or lifting-thrusting manipulation on distant vision of naked eye in patients of juvenile myopia: a randomized controlled trial. Zhongguo Zhen Jiu (Chin). 2014; 34(5): 465-468.
- [24] Gerwin RD. Classification, epidemiology, and natural history of myofascial pain syndrome. Curr Pain Headache Rep. 2001; 5(5): 412–420.
- [25] Han SC, Harrison P. Myofascial pain syndrome and trigger-point management. Reg Anesth. 1997; 22(1): 89–101.
- [26] Myers T. Anatomy Trains: Myofascial Meridians for Manual and Movement Therapists (3rd edition). London: Churchill Livingstone, Elsevier; 2014.
- [27] Arendt-Nielsen L, Svensson P. Referred muscle pain: basic and clinical findings. Clin J Pain. 2001; 17(1): 11-
- [28] Giamberardino MA, Affaitati G, Costantini R. Chapter 24 Referred pain from internal organs. Handb Clin Neurol. 2006; 81: 343–661.
- [29] Langevin HM, Churchill DL, Cipolla MJ. Mechanical signaling through connective tissue: a mechanism for the therapeutic effect of acupuncture. FASEB J 2001; 15(12): 2275–2282.
- [30] Peng ZF. Comparison between western trigger point of acupuncture and traditional acupoints. Zhongguo Zhen Jiu (Chin). 2008; 28(5): 349–352.
- [31] Peng ZF. Characteristics and insights of trigger point acupuncture. Journal of Yuannan University of Traditional Chinese Medicine (Chin). 2009; 31(5): 55–58.
- [32] White A. Editorial Board of Acupuncture in Medicine. Western medical acupuncture: a definition. Acupunct Med 2009; 27(1): 33–35.

#### ABSTRACT IN CHINESE

[摘 要]激痛点(TrP)针灸是一种使用毫针刺激激痛点的针灸疗法,它的形成是基于现代医学对激痛点的理解结合传统针灸而演变而成。在过去的20年中,激痛点针灸相关的概念和针灸技术不断地发展;采用刺激激痛点治疗疾病在临床得到广泛应用,激痛点针灸治疗肌筋膜疼痛综合症以外其他疾病的趋势也日渐显著。在这篇文章中,我们从以下几个方面比较了激痛点针灸和传统针灸的异同:针刺穴位,针具使用和针刺方法,以及治疗适应症。在临床上,传统针灸包括多种治疗方式和操作手法,已被广泛使用于多种病症。在科研方面,传统针灸的疗效也在各种实验中得到验证。激痛点针灸具有其独特的特点,是对传统针灸理论的进一步发展,尤其是经络的概念和阿是穴的衍生。激痛点的位置,分布规律和疼痛模式类似于那些传统的穴位;针具的选择,针刺的深度,以及操作手法是传统针灸的一部分。因此激痛点针灸是传统针灸的一个组成部分。

[关键词] 激痛点 针灸 激痛点针灸 疼痛 肌筋膜疼痛症候群