

Academic Debate

Traditional Chinese acupuncture manipulations and “dry needling”

中国传统针刺刺法与“干针”

HAO Yang (郝洋)^{1,2}, LIU Wei-hong (刘炜宏)^{1,2}✉

1. Institute of Acupuncture and Moxibustion of China Academy of Chinese Medical Sciences, Beijing 100700, China; 2. The World Federation of Acupuncture-Moxibustion Societies (1. 中国中医科学院针灸研究所, 中国北京 100700; 2. 世界针灸学会联合会)

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First author: HAO Yang (1987-), female, assistant editor.

Research field: Research on modern literature of acupuncture-moxibustion.
E-mail: 307110226@qq.com

✉ Corresponding author: LIU Wei-hong (1957-), female, senior editor.

Research field: Study of acupuncture-moxibustion theory and standardization
E-mail: weihongliu010@sina.com

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ABSTRACT

In this paper, the authors studied the manipulation of “dry needling”, reviewed Chinese ancient and modern literature of acupuncture-moxibustion, and found that “dry needling” is very similar to triple needling, superficial needling, joint valley needling, surround needling, and other traditional Chinese acupuncture-moxibustion manipulations; even if in modern China, before and after the invention of “dry needling”, some unique therapies, such as oblique insertion therapy at *Ashi* point, sliver needling, Fu’s subcutaneous needling, and long-round needling, were also invented. It can be seen that “dry needling” therapy is actually a kind of differentiation of traditional Chinese acupuncture-moxibustion in the international communication. The spread of traditional Chinese acupuncture-moxibustion in the West is the basis for the invention of “dry needling” therapy, and “dry needling” therapy develops and enriches traditional Chinese acupuncture-moxibustion.

KEY WORDS: Dry needling; triple needling; superficial needling; joint valley needling; surround needling; oblique insertion at *Ashi* point; sliver needling; Fu’s subcutaneous needling; long-round needling; traditional acupuncture-moxibustion

Recently, a kind of acupuncture manipulation, which is called “dry needling”, spreads widely. “Dry needling” is a “new” acupuncture manipulation proposed by scholars in Europe and America and other countries based on the theory of trigger point (TrP), it’s main manipulation: after being determined, the trigger point is fixed between two fingers, and the needle is inserted at 1–2 cm from the point. The angle between needle tip and skin surface is about 30°, and the needle is inserted into skin along the direction of the muscle fibers. Rapid lifting and thrusting is mainly adopted. It is emphasized that on the basis of fixed induration, the needle is directly inserted into the trigger point and lifting and thrusting method is quickly performed with an appropriate speed of 20–30 times/min. If there are multiple trigger points in a part of the muscle,

and each trigger point has its induration, fan-shaped needling manipulation or surround needling should be conducted in the region. It is emphasized during the dry needling therapy that the needle tip should be fully inserted to penetrate the induration region, then the tip is lifted to the subcutaneous tissue; then the needle is inserted for the second time; the manipulation is conducted repeatedly, so as to eliminate all the trigger points in induration as much as possible.

“Dry needling” is mainly used for the treatment of muscular fascia painful diseases. The inventor thought that this is a new way of body surface stimulation, and has no relation with traditional Chinese acupuncture. However, the authors deeply studied the manipulation of “dry needling”, reviewed Chinese ancient and

modern literature of acupuncture-moxibustion, and found that “dry needling” is very similar to some traditional Chinese acupuncture manipulations; even if in modern China, before and after the invention of “dry needling”, some unique therapies are also similar to it. The details are as follows.

CHINESE ANCIENT MANIPULATIONS SIMILAR TO “DRY NEEDLING”

After reading ancient books, the authors found that there are many methods of oblique insertion or perpendicular insertion on partial lesion, such as triple needling, superficial needling, joint valley needling, surround needling, etc.

Triple needling therapy

As one of “twelve needling methods”, triple needling was seen in *Lingshū* (《灵枢》, *Miraculous Pivot*) at the beginning, and was an acupuncture method for *bi* syndrome caused by cold invasion in ancient times. Triple needling refers to that three needles are inserted into the lesion parallelly, with one needle perpendicularly inserting into the middle of lesion, and the other two into both sides. It was said in *Miraculous Pivot* that “Triple needling refers to an acupuncture method with one needle perpendicularly inserting into the middle of lesion, and the other two into both sides, so as to treat *bi* syndrome caused by cold invasion.” Acupoints on the tenderness point or middle of lesion or main acupoints were selected. Firstly, one needle is perpendicularly inserted into the lesion, after *deqi*, two needles are perpendicularly or obliquely inserted into skin 1–2 *cun* from the lesion in the direction of upside, downside, left or right. Then, lifting and thrusting and twirling should be conducted, and the needling sensation should be to the extent that the feelings of tingling, swelling and heavy appear in partial skin, and spread to the surrounding^[1].

Superficial needling therapy

Superficial needling, also called subcutaneous insertion or transverse insertion, refers to a kind of acupuncture manipulation conducted subcutaneously or in the shallow part of skin when the disease is superficial. Superficial needling was comprehensively discussed in *Huangdì Nèijīng* (《黄帝内经》, *Yellow Emperor's Inner Classic*). It was said in *Miraculous Pivot* that “Superficial needling refers to shallow and superficial insertion, which can treat muscle spasm”, which indicated the relationship between the layer of disease and the depth of acupuncture, and the superficial needling manipulation and its clinical application. According to *Nèijīng* (《内经》, *Inner Classic*), superficial needling refers to a kind of

manipulation that the needle is inserted obliquely into the muscle, which can be used for the treatment of muscle spasm. Manipulation: The patient is asked in supine or lateral position, stainless steel needles with different lengths are adopted by a doctor to insert into skin with a small angle, and the angle between the needle body and skin is 15–20 degree. After insertion, the needle body is not inserted into the muscle layer but perpendicular insertion or penetration needling is conducted subcutaneously^[2].

Joint valley needling therapy

“Joint valley needling” does not refer to needling at Hégu (合谷 LI 4), but refers to the contents said in *Miraculous Pivot* that “Joint valley needling looks like a foot of chicken, and the needle is inserted into muscle for treatment of *bi*”. Manipulation: One needle is perpendicularly inserted into the deep muscle of the acupoint, lifting and thrusting is conducted. After *deqi*, the needle is lifted to the shallow layer, and oblique insertion towards left or right side is conducted, respectively. Joint valley needling is a reinforced stimulus method with the main manipulation of multi-direction lifting and thrusting. The needle at the same acupoint is inserted to three different directions with a strong incitement; it is a heavy stimulation method with the functions of calming, spasmolysis and relieving pain. Joint valley needling is adopted in order to give play to the function of penetration needling, so as to select few acupoints, obtain strong needling sensation and good efficacy^[3].

Surround needling therapy

Surround needling refers to a kind of surrounding acupuncture manipulation conducted around the lesion for the purpose of improving efficacy. This method is evolved from “central-square needling” in ancient times. It was recorded in *Miraculous Pivot* that “Central-square needling refers to a kind of acupuncture manipulation with one needle in the middle of lesion, and four needles around the lesion; all the insertion should be shallow acupuncture with the purpose of treatment of pathogenic cold”. The characteristic of the surround needling is to take the place of the lesion as the center, and carry out surrounding acupuncture. Its manipulation is similar to that of central-square needling, but it is not limited to 4 needles. Therefore, it is believed that surround needling is the evolution of central-square needling^[4].

Lifting and thrusting manipulation

Lifting-thrusting and reinforcing-reducing manipulation was definitely put forward in *the Yellow Emperor's Inner Classic* in the Spring and Autumn

and the Warring States Period (770 BC – 221 BC), which laid a theoretical foundation for lifting-thrusting and reinforcing-reducing. In the long history of the development of traditional Chinese acupuncture-moxibustion, the manipulation of filiform needle was far more than this one, and different techniques can play different roles in treatment. The manipulation of dry needling therapy is still limited to lifting and thrusting; if it can be combined with twirling method in traditional acupuncture, it will be more conducive to completely eliminate trigger points, so as to further improve the efficacy.

CHINESE MODERN MANIPULATIONS SIMILAR TO “DRY NEEDLING”

Oblique insertion therapy at *Ashi* point invented by LU Ding-hou

Dr. Karel, coming from Czechoslovakia, was the first person who reported the clinical research on dry needling. In 1979, he praised highly to adopt dry needling in treatment of a series of musculoskeletal pain in his report on needling efficacy in treatment of muscular fascia. Professor Hong Zhang-ren, from department of physical medicine and rehabilitation of University of California Irvine, went to the United States to engage in clinical treatment and experimental study in 1978, and proposed the treatment mechanism and method of dry needling in treatment of muscular fascia trigger point^[5].

During the development of Chinese modern acupuncture-moxibustion, however, as early as in 1973, there were needling methods similar to “dry needling”. In 1973, professor LU Ding-hou from Beijing Sport University learnt a method for treatment of muscle strain by “oblique insertion and warming-needle moxibustion at *Ashi* point” from a doctor from Shanxi under the guidance of physician ZHAO Ji-zu, and the efficacy was very good. Then, he further developed “*Ashi* point” from “acupuncture at tender point” to “acupuncture at rigid, stripy and impaired muscle bundle”; “warming-needle” was not used, but the acupuncture needle was obliquely inserted into impaired muscle bundle, which softened the stiffness, relieved pain, recovered function, and even recovered functions completely. This is the oblique insertion therapy at *Ashi* point which conducted “acupuncture at impaired muscle bundle”.

As the name implies, oblique insertion should be adopted in oblique insertion therapy at *Ashi* point. During needle insertion, the needle handle is held by a needle-holding hand, and the needle body is

pinched by the other hand to keep the perpendicular angle between needle body and the skin surface, and the needle is vertically inserted downward through synergistic strength by two hands. After the needle passes through the skin surface, the needle handle and needle body should be oblique to keep an appropriate angle with skin according to the depth of stripy muscle bundle, and the needle should be obliquely inserted into muscle under the skin surface. When the patient feels that the needle tip aligns with the most stiff or painful point in the expected direction, the needle can be inserted continuously to keep the needle tip accessing to muscle bundle. When the patient feels aching pain or swelling, the needle can be lifted to under the skin, then, palpation is conducted, and it will be found that the stiff muscles are obviously softened, tenderness disappears, and limb functions recover significantly. Therefore, when the patients feel aching pain or swelling, the needle can be withdrawn immediately without needle retention. During needle withdrawal, the little finger of needle-holding hand contacts with skin as the support of the thumb and the index finger in lifting the needle to under the skin through flexion-extension of the thumb and index finger. Then, palpation is conducted on the tender point and the locations around the tender point. If the original tender point disappears, but obvious stiffness and tenderness still exist in surrounding parts, needle insertion direction can be changed to the locations with symptom. The needle can be withdrawn completely after the symptoms in surrounding parts are relieved or disappear^[6].

Sliver needling therapy invented by XUAN Zhe-ren

Also in the 1970s, Xuan Zhe-ren, a Chinese orthopedic expert, found out the distribution rules of damaged tenderness point of soft tissue on the basis of analyzing the failure cases of treatment for severe lumbocrural pain and prolapse of lumbar intervertebral disc with human soft tissue releasing. Then, in strict accordance with the anatomical-surgical rules of human soft tissue, he conducted intensive acupuncture therapy by adopting hereditary silver needles of physician LU Yun-xiang from Shanghai, China, and achieved unexpected efficacy. This acupuncture therapy not only has the efficacy of immediate analgesia, but also possesses long-term analgesic effect. It is more surprising that on the location where the needle is inserted, lasting muscle relaxation effect is generated, that is, muscle cramp, which is difficult to deal with and caused by pain, is magically relieved. This is silver needling therapy.

As for silver needling, tender points are selected

in the specific lesion tissues with soft tissue pain, with the needle density among tender points of 1.0–2.0 cm, generally. The tender points are located in the joints of muscle or muscular fascia and periosteum, and have a strict anatomical distribution which is consistent with the position and range of the surgical release. Under the circumstance of aseptic operation, intradermal injection with 0.5% lidocaine is conducted on each insertion point to form a protuberance with a diameter of about 5 mm, in order to prevent the skin from pricking and causalgia caused by moxa burning. Silver needles, undergoing autoclave sterilization and with appropriate length, are selected to insert into protuberances, and perpendicular insertion or oblique insertion is performed aiming at the direction of deep lesion area. The needles are directly inserted into periosteal attachment points (tender points) through subcutaneous muscle or fascia, and the needling sensation is to the extent that the feelings of tingling, swelling and heavy appear. Generally, the more severe the soft tissue diseases, the stronger the needling sensation, and often, the more obvious the pain sensation. After the needles are inserted in place, lifting and thrusting and twirling is not conducted. After needle insertion, a moxa-ball with a diameter of about 1.5 cm is equipped on the end of each needle, and then the moxa-ball is lighted for slow burn. At the moment, the patient is aware of comfortable warm feeling in the deep soft tissue of the treatment part, and the sense of pain completely disappears^[7].

FU's subcutaneous needling therapy invented by FU Zhong-hua

With disposable FU's subcutaneous needles as treatment tools, FU's subcutaneous needling is a kind of minimally invasive physical therapy. By taking local symptom as treatment point, the needle is inserted around the symptom (rather than in the local symptom) with the tip aiming at lesions, and needle body inserting along the superficial fascia (mainly the subcutaneous loose connective tissue). After reaching a predetermined depth, the needle handle is swung so that the tip can sweep under the skin. After sweeping for several times, the needle is retained. During FU's subcutaneous needling, the needles are not inserted into muscle as traditional acupuncture, but the needle body is retained in subcutaneous loose connective tissue. The whole needle body is like floating on the muscle, so it is named FU's subcutaneous needle. No matter where the needle insertion point is, the needle tip must aim at the lesion (pain spot, sensitive spot, etc.) with no deviation. Sweeping is emphasized during FU's subcutaneous needling, that is, after insertion, the needle body is swung to the left and

right, which is the most distinctive feature of FU's subcutaneous needling. The important reason for assessment of efficacy is the sweeping movement and the completion degree of sweeping^[8].

Long-round needling therapy invented by XUE Li-gong

Long-round needling was derived from *Yellow Emperor's Inner Classic*. Under the guidance of meridian sinew theory, long-round needles are used for releasing lesion point, and treatment for deep pathogen and distant *bi* syndrome of joints, and diseases of meridians and collaterals and viscera. By reference to long needles and round needles in *Yellow Emperor's Inner Classic*, and golden needles unearthed from Mancheng County, Hebei, China, professor XUE Li-gong developed long-round needle combining the characteristics of long needle and round needle. With one end of sharp shape, and the other end of round and blunt shape, long-round needles combine the two kinds of shapes together to form a shape of sharp but not edged, round but not blunt, which is not only conducive to treatment, but also able to guarantee the safety of operation.

The long-round needle manipulation is as follows: (1) Joint needling: perpendicular insertion is conducted on the superficial layer of lesion point of tendon end, then, scraping is performed to the left and right for several times to release the adhesion of superficial layer of lesion point. (2) Relaxing needling: after joint needling, the needles are moved to both sides of the tendon to release the lesions around the tendon, that is, deep insertion to the deep layer of lesion point, then, pricking is performed forward and backward along the tendon to release lesion. (3) Short needling: for the patients with subperiosteal hemorrhage or exudation, and with intractable pain, perpendicular insertion is conducted on the deep layer of lesion, and cutting is performed to release "transverse collateral", which is called "short needling" or "transport needling". Long-round needling therapy is one of the ancient closed surgery methods. By reference to sterile operation and anesthesia method in modern medicine, professor XUE not only improves the safety of long-round needle during contemporary application, but also reduces patients' pain during operation^[9].

CONCLUSION

According to the above comparison, the needling direction and manipulation of dry needling therapy are exactly the same as that of triple needling, superficial needling, joint valley needling and surround needling

in the *Yellow Emperor's Inner Classic*. Even if in modern China, before and after the invention of “dry needling”, some unique therapies, such as oblique insertion therapy at *Ashi* point, sliver needling, FU's subcutaneous needling, and long-round needling, were also invented, and most manipulations are the same as dry needling. The generation of these needling methods shows that ancient acupuncture technologies spread to modern times, and integrate with modern knowledge of life science, that is to say, the development trend of acupuncture in modern times is to explain the traditional Chinese acupuncture therapy with modern knowledge of life science. The point of application and mechanism of acupuncture therapy are closely related with nerves and muscles, and the intervention of anatomical knowledge is undoubtedly logical.

Regardless of how the inventor of “dry needling” denied that “dry needling” is a part of traditional Chinese acupuncture, the tools and stimulation adopted in and the needling sensation of “dry needling” are exactly the same as acupuncture therapy. It is obvious to see that “dry needling” therapy is actually a kind of differentiation of traditional Chinese acupuncture in the international communication. The authors^[10] have elaborated that one of the characteristics of the development of modern acupuncture medicine is the emergence of a variety of acupuncture therapies. In nowadays with diversified culture and development, the diversification of acupuncture therapy is inevitable. The spread of traditional Chinese acupuncture in the West is the basis for the invention of “dry needling” therapy, and “dry needling” therapy develops and enriches traditional Chinese acupuncture. “Dry needling” is also a branch of traditional Chinese acupuncture in modern times, just as a variety of newly-developing acupuncture manipulations listed above.

ABSTRACT IN CHINESE

[摘要] 笔者研究了“干针”的操作，回顾了中国古代和现代的针灸文献，发现“干针”与中国传统针灸刺法中的齐刺、浮刺、合谷刺、围刺法等十分相像；即使是在中国现代，在“干针”发明的先后，也诞生了一些独特的疗法，如阿是穴斜刺疗法、银质针疗法、浮针疗法、长圆针疗法等。由此可以看出，“干针”疗法其实是中国传统针灸在国际化传播中的一种分化。中国传统针灸在西方的传播是“干针”疗法发明的基础，“干针”疗法则发展和丰富了中国传统针灸。

[关键词] 干针 齐刺 浮刺 合谷刺 围刺法 阿是穴斜刺疗法 银质针疗法 浮针疗法 长圆针疗法 传统针灸

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