

Superficial Acupuncture with Qing Long Bai Wei Method to Treat Pain Associated with Trigger Points: A Pilot Study

Yong Yii Pin & Leong May Ho


Abstract

This study investigated the efficacy of superficial acupuncture using the *Qing Long Bai Wei* (Green-Blue Dragon Shaking Its Tail) method on reducing pain associated with trigger points. A total of 20 participants with shoulder pain were randomised to receive standard traditional acupuncture or superficial acupuncture using the *Qing Long Bai Wei* method. Outcomes were measured before and after one treatment using a visual analogue scale (VAS) and the data were analysed using repeated measures analysis of variance. This showed that the mean change in VAS of participants with shoulder pain treated by standard traditional acupuncture was 2.20 ± 0.632 , while for participants treated by superficial acupuncture it was 4.60 ± 2.119 , a statistically significant difference ($p < 0.05$). This pilot study therefore suggests that the immediate pain-relieving effect of superficial acupuncture using the *Qing Long Bai Wei* method is greater than standard traditional acupuncture.

Keywords

Superficial acupuncture, Qing Long Bai Wei, shoulder pain, muscle knot, needle technique, pain, musculoskeletal

1 Introduction

 Pain syndromes characterised by trigger points — focal, discrete and hyperirritable areas in taut bands of muscle fibres — are associated with pain referral patterns, motor dysfunction and autonomic phenomena (Fernández de las Peñas et al., 2007). From the perspective of traditional Chinese medicine (TCM), pain syndromes characterised by the presence of strip-like hardness or nodules relate to pathogenesis of the twelve sinew channels (*'shi er jing jin'* - see Yu & Baoqiang,

2021). Acupuncture has been widely used for treating acute or chronic pain involving trigger points, although studies have yielded conflicting results (Chou et al., 2009). Superficial acupuncture needling has been associated with less pain than standard traditional needling, while still producing immediate pain relief (Wang et al., 2018). This research intended to investigate superficial acupuncture using *Qing Long Bai Wei* (Green-Blue Dragon Shaking Its Tail) manipulation in the



Image 1: Traditional acupuncture - needle inserted at 90 degrees to the skin into trigger point



Image 2: Superficial acupuncture manipulation - needle inserted obliquely 15 to 20 degrees to the skin and moved with Qing Long Bai Wei method (NB image shows needling of the forearm rather than shoulder for visual clarity)

treatment of shoulder pain associated with trigger points. The shoulder is a common location for myofascial pain, often presenting with trigger points on the upper and middle trapezius and deltoid muscles (Bron et al., 2011); for this reason participants with shoulder pain were selected for this research.

In the chapter '*Jin Zhen Fu*' (Ode to the Golden Needle) of *Zhen Jiu Da Quan* (Comprehensive Compendium of Acupuncture and Moxibustion) by Xu Feng, it is stated that the *Qing Long Bai Wei* manipulation is one of four needling methods that can be used to promote qi flow along channels to treat pain and masses caused by stagnation of qi and blood (Ming et al., 2018). This research compared the effectiveness of superficial acupuncture using *Qing Long Bai Wei* manipulation with that of standard traditional acupuncture. The results were assessed using a visual analogue scale (VAS) and then statistically analysed.

2 Methodology

2.1 Intervention

This study was designed and conducted in the TCM Treatment Centre of the INTI International University in Malaysia. A total of 20 participants with shoulder pain were randomly divided into a superficial acupuncture group (n=10) and a traditional acupuncture group (n=10). Outcomes were measured by VAS before and after a single acupuncture treatment. An analysis of variance (ANOVA) of these data was then conducted using SPSS Statistics 24 software.

Superficial acupuncture needling has been associated with less pain than standard traditional needling while still producing immediate pain relief.

2.2 Subjects

Patients aged between 18 to 45 years old with shoulder pain were referred from the university TCM treatment centre for examination and treatment. Trigger points were identified during a physical examination of the shoulder area, including the trapezius, deltoid, biceps and triceps muscles. Patients were excluded if (a) they were pregnant or menstruating; (b) they had a history of surgery in the shoulder area; (c) they were taking non-steroidal anti-inflammatory or pain-relieving medication; or (d) there was local skin infection in the shoulder area.

2.3 Traditional acupuncture group method

First, a trigger point was located in the shoulder area. Then a 1.5 inch needle was inserted perpendicular to the skin half to one inch deep into the point and a 'de qi' sensation was elicited (Image 1). The needle was then retained and taken out after five minutes.

2.4 Superficial acupuncture group method

First, a trigger point was located in the shoulder area. Then a 1.5 inch needle was inserted in the direction of the shoulder directly above the point at an angle of 15 to 20

degrees to the skin, as shown in Image 2. *Qing Long Bai Wei* manipulation was then performed as follows: (1) The handle of the needle was moved away from and towards the practitioner in a rhythmic sweeping motion; (2) The skin around the muscle knot was simultaneously pinched with the fingers of the non-needling hand and kneaded in tandem

Group	VAS before treatment	VAS after treatment	Difference in VAS
Traditional Acupuncture	6.30±1.494	4.10±1.197	2.20±0.632
Superficial Acupuncture	6.40±1.713	1.80±1.398	4.60±2.119

Table 1: Mean VAS results before and after treatment with standard deviation

with the movement of the needle. This manipulation was performed for 30 seconds, then the needle was retained for five minutes.

3 Results

The VAS results are listed in Table 1. All participants reported reduced pain in the shoulder area. The VAS scores after treatment in the superficial acupuncture group showed significantly greater improvement than those in the traditional acupuncture group ($p < 0.05$). No adverse reactions were reported by participants.

4 Discussion

In 1816, the British physician Balfour associated ‘thickenings’ and ‘nodular tumours’ in muscles with local and regional muscle pain (Stockman, 1904). Travell & Rinzler coined the term ‘myofascial trigger point’ in the 1950s, reflecting their finding that these nodules can refer pain to both muscle and overlying fascia (Travell & Rinzler, 1952). From the TCM perspective, such nodules are understood to be caused by invasion of exogenous pathogens like wind, dampness or cold into the superficial layers of the body, traumatic injury or strain due to overuse (Cong et al., 2020). This leads to obstruction of qi and blood circulation in the channels, consequently manifesting as strip-like hardness or nodules if no treatment is provided. Such changes are classified in TCM as disorders of the twelve sinew channels (Yuting et al., 2019).

The *Ling Shu* (Divine Pivot) chapter ‘*Jing Jin*’ (Sinew Channels) describes disorders of the twelve sinew channels in terms of three aspects: abnormal sensation, abnormal movement and abnormal symptoms (Yuting et al., 2019). Abnormal sensation includes pain, stiffness or even spasm of the tendons or muscles along the pathway. Abnormal movement includes limitation of movement of the joint or muscles, such as being unable to bend a knee or lift an arm. Abnormal symptoms are specific to each channel, for example pathology of the sinew channel of *Shao Yin*

is associated with rapid breathing, vomiting blood and spitting bloody sputum (Yuting et al., 2019). Most of the disorders of the sinew channels are associated with local or distal pain along the channel (Yu & Baoqiang, 2021).

Nei Jing Tai Su (Inner Classic: Grand Essentials) states that the twelve primary channels circulate qi and blood around the whole body, both superficially and also deeper to the *zang fu* organs. The twelve sinew channels, on the other hand, do not directly connect with the *zang fu* organs. Therefore, different treatment methods are required for the sinew channels and the primary channels. The twelve primary channels have many acupuncture points that can regulate internal dysfunction, while the twelve sinew channels do not have their own documented acupuncture

points (Yixuan et al., 2021). That is why there are very few treatment methods described for the sinew channels in clinical literature. However, both systems are important parts of TCM physiology and complement each other to circulate *qi*

and blood and coordinate the movement of the body. It is therefore important to differentiate treatment of the sinew channels from treatment of the primary channels; the sinew channels are located superficial to the primary channels, and their pathogenesis manifests with palpable and sometimes visible knots (Yu & Baoqiang, 2021).

Superficial acupuncture is named ‘*fu ci*’ (浮刺) and was first mentioned in the *Nei Jing*:

九曰浮刺，浮刺者，傍入而浮之，以治肌急而寒者也

The ninth needling method is called fu ci which means to insert the needle superficially beside the affected part in order to treat cold spasm of muscles.

The word ‘*fu*’ means floating, and this needling method involves inserting the needle obliquely at an angle of 15 to 20 degrees to the skin, thus avoiding penetrating more deeply into the muscle layer (Haijuan et al., 2021). Because the sinew channels are located superficial to the primary channels, shallow needling is used in treatment to reach


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the source of disease and relieve pain (Haijuan et al., 2021).

Qing Long Bai Wei manipulation is one of the four '*Fei Jing Zou Qi*' ('flying channel and circulating qi') needling techniques first mentioned in the chapter '*Jin Zhen Fu*' of the *Zhen Jiu Da Quan*. '*Qing Long*' means 'green dragon' and in this technique the needle is moved like a dragon wagging its tail (Hailin & Fuchun, 2017). The tip of needle should be directed towards the location of the problem so that *qi* is directed there for healing (Ming et al., 2018). Clinically, it can be used to stimulate circulation of channel *qi* to treat abdominal masses, goitre, scrofula, arthralgia and other diseases caused by stagnation of *qi* and blood (Hailin & Fuchun, 2017). Another study of superficial needling combined with *Qing Long Bai Wei* manipulation found that it softened nodules and relieved pain more effectively than the standard needling method (Yupin & Li, 2016).

There are several limitations to this study. First, the participant numbers were not large enough to prove effectiveness of superficial acupuncture. Secondly, the research subjects were not distributed evenly throughout the population and these characteristics may be associated with the specific responses to acupuncture. Thirdly, there was no follow-up after the single session of treatment so the long-term therapeutic effects could not be examined. Further well-designed and large-scale research studies are required to verify the results of this trial.

5 Conclusion

This study found that superficial acupuncture combined with *Qing Long Bai Wei* method was significantly more effective at relieving pain than traditional acupuncture. The effect of relaxing the trigger points could be felt on palpation - the points became softer after superficial acupuncture was performed. This method could be considered as an alternative to tuina therapy to reduce pain and dysfunction caused by trigger points, without requiring as much exertion or physical strength. 

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