



Short Communication

The Mazzanti AcuOsteo Method[®]: Pathology and Treatment with Acupuncture and Osteopathy of the Musculoskeletal Pain of The Upper and Lower Limbs

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ABSTRACT

Musculoskeletal pain is one of the most frequent reasons for consultations in my clinic. In my experience of 35 years, acupuncture, and osteopathy are effective techniques in the treatment of musculoskeletal pain of the upper and lower limbs. Pain reported by the patient often affects a widespread area around the joint and is usually associated with some stiffness. The aim of acupuncture is to restore the local circulation of Qi and Blood, inducing an analgesic and anti-inflammatory effect, along with myofascial detensioning. The aim of the osteopathic manipulative treatment is to return joints to their normal position and restore restricted joint motion. The Mazzanti AcuOsteo Method is a newly patented method which uses the synergistic combination of using points for acupuncture, cupping or bleeding, and osteopathy to maximize effectiveness of treatment for musculoskeletal pain.

Keywords: acupuncture, bleeding, osteopathy, somatic dysfunction, manipulative therapy

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Introduction

As a specialist in physical medicine and rehabilitation, and sports medicine, most of my daily practice in clinic focuses on the treatment of musculoskeletal pain of the upper and lower limbs caused by trauma, microtrauma, overuse (through work and sports), as well as osteoarthritis-related conditions. Musculoskeletal pain is one of the main reasons why patients are treated by an acupuncturist or an osteopath.

When I see a patient, the challenges I face are: (1) to make a diagnosis according to Western medicine and traditional Chinese medicine including acupuncture, and osteopathy; and (2) choose the correct therapeutic approach. To determine the course of treatment the following questions need to be answered: (1) should the patient to be referred to a Western medicine clinic; (2) is an energetic approach the best solution i.e., acupuncture; or (3) is a structural approach the best solution i.e., osteopathy? The final choice is to decide whether acupuncture and osteopathy should be combined.

I have administered acupuncture for more than 35 years and studied its mechanisms of action. What still strikes me

the most is how acupuncture, first developed 3,000 years ago, has integrated successfully not only with conventional Western medicine, but also with osteopathic medicine which was introduced at the end of the 19th century.

Acupuncture and osteopathic treatment can be administered alone or in combination and have successful results. Each technique manages pain differently, which is why they have limitations as individual treatments and work complementary as a combined treatment [1-4]. The combination of acupuncture and osteopathic manipulation treatment (OMT) can maximize treatment outcomes.

Materials and Methods

The diagnostic and semiological principles of musculoskeletal pain according to traditional Chinese medicine, are well known to practitioners [5,6], whereas the principles of osteopathic diagnosis and procedures may be less known.

Osteopathy is a system of diagnosis and treatment for a wide range of medical conditions and is based on the principle that the wellbeing of an individual depends on

their bones, muscles, ligaments, and connective tissue functioning smoothly together. Osteopaths work to restore the body to a state of balance using OMT to increase joint mobility, relieve muscle tension, and promote healing of the body's mechanisms [7,8].

In the UK, the National Institute for Health and Care Excellence guidelines on managing lower back pain and sciatica recommend manual therapy, alongside exercise, as a treatment option. In addition, manual therapy is also recommended as a possible treatment option for osteoarthritis on the UK National Health Service website, although "osteopathy" is not specifically mentioned [9].

The Mazzanti AcuOsteo Method starts with the examination of passive joint kinetics. This is the 1st essential step because it is the only way to make a diagnosis of a somatic dysfunction. All joints have a free range of motion due to their elastic structures that keep the articular surfaces in the correct position. In a specific plane of motion, there is a balance point of muscular-ligamentous tension that allows passive mobilization of a small amplitude. This amplitude is qualitatively and quantitatively the same in both directions. When this balance is broken, there is an osteopathic dysfunction that causes pain. Even when imaging techniques such as ultrasound, x-ray, or magnetic resonance imaging provide no information, somatic dysfunctions can be detected and assessed with simple maneuvers carried out by an expert in osteopathy.

Once the somatic dysfunction is detected, OMT is performed and then followed by a specific acupoint protocol for acupuncture, or cupping or bleeding, which has been named the "Five Options." This protocol is based on the use of Muscle and Connecting secondary channels through a combination of specific acupoints.

Acupoint protocol option one deals with the selection of those distal points whose great dynamics and effectiveness,

in terms of therapeutic action, provide immediate results. Option two involves selection of local points, because they also have an immediate, and specific action with regards to removal of Qi stagnation and blood stasis, both of which cause local pain in the muscles, tendons, ligaments, and joints. Options three, four, and five, aim to achieve therapeutic results and stabilize the therapeutic results obtained with the 1st two options.

The "Five Options" are specifically designed to set a therapeutic strategy from the exterior to the interior, which means from the surface to the skin to the required depth within the skin. Option one starts with treatment of the musculoskeletal pain to be resolved which, due to its nature, is located on the superficial layers of the body. Gradually, a deeper treatment is performed, with option four aiming to rebalance the inner organs directly or indirectly involved in pain. Option five includes micro-systems (ear and wrist-ankle) that can be treated to manage both superficial and deep conditions.

After acupuncture, cupping or bleeding the distal and local points, it is mandatory to test the efficacy of treatment before moving to the following step. By proceeding in this way, the correctness of the choice made by the practitioner is confirmed, and the patient's motivation to continue with the treatment sessions increases as they realize that their condition can be successfully treated. Finally, this virtuous cycle leads to an increase in the benefits from the therapy. By doing so, the practitioner understands which acupoints are the most effective according to physiology, therapeutic actions, and indications. The acupoints and steps of the "Five Options" are summarized in Table 1.

If, on one hand, acupuncture restores the local circulation of Qi and blood, inducing an analgesic or anti-inflammatory effect, as well as myofascial detensioning, on the other hand, osteopathy restores proper joint movement by

Table 1. The "Five Options" Step by Step.

Acupuncture, bleeding, or cupping protocol option	Description	Steps
1	Distal points provide immediate results to treat the MSK pain located on the superficial layers of the body	1 st Muscle channels 2 nd Luo connecting channels 3 rd Empirical points 4 th Opposite extremity (upper/lower) 5 th Categories of traditional points 6 th Extraordinary vessels
2	Local points with an immediate and specific action on Qi stagnation and blood stasis	1 st Painful points (Ah Shi) and acupoints 2 nd Anatomically mirrored Painful points (opposite side)
3	Adjacent points stabilize the results obtained	1 st Adjacent points
4	Etiological points stabilize the results obtained and rebalance the inner organs directly or indirectly involved in pain	1 st According to patterns 2 nd General points
5	Microsystems stabilize the results obtained and manage both superficial and deep conditions	1 st Wrist and ankle acupuncture 2 nd Ear acupuncture

eliminating the causes of tension determining the inflammatory state.

Acupuncture can break the vicious circle that may decrease the effectiveness of the osteopathic treatment and delay recovery time, as the tensions caused by the inflammatory irritation of the muscles involved in fine movements encourages the recurrence of joint dysfunction for which the body maintains some sort of “memory.”

Case Study

Upon presentation, the patient (male, 50 years) had suffered from pain affecting his right shoulder for about 6 months. The pain was of unknown origin and was described as stabbing pain which localized on the lateral aspect of his shoulder. The pain radiated to the deltoid muscle and was triggered at night when the patient slept on the affected side. The pain did not improve with movement.

1. Clinical picture [10]

When abducting the arm, the patient rated his pain as a score of 8 using the visual analog scale (VAS) where 0 is no pain and 10 is the most pain imaginable. The patient's functional limitation was equal to 2/3. Pain was perceived when the patient's movement exceeded 30° and was localized in the subacromial-deltoid portions. Positive Jobe's and Yocum's tests indicated supraspinatus tendonitis and impingement.

2. Acupuncture: Diagnosis and treatment protocol

Blood stasis and Qi stagnation in the Large Intestine Muscle and Connecting channels. Principle of acupuncture treatment: to remove Qi stagnation and blood stasis.

2.1. Option one - Distal points

- Jing-Well point LI1 with bleeding.
- Luo point LI6 (opposite side).
- Empirical point ST38 (opposite side).
- Point in the corresponding joint of the paired channel according to the 6 stages ST31 opposite side.
- Shu-Stream point LI3 (affected side) and Shu-Stream point ST43 (opposite side) on the paired channel according to the 6 stages.

2.2. Option two - Local points

- Ah Shi point(s) and LI15, with cupping and bleeding.
- Anatomical mirrored points (opposite side).

2.3. Option three - Adjacent points

- LI16, TE14, Jianqian, LI14, SI11 and SI12.
- Insertion point LI1.

2.4. Option four - Etiological points according to pattern and general points

- Etiological points: LI4, if there is Qi stagnation and/or blood stasis.
- General points: GB34 and LR3 to treat tendons and muscles, and Qi stagnation and blood stasis, too.

2.5. Option five - Microsystems

- W-A acupuncture: Upper 5
- Ear acupuncture: Shenmen, Shoulder, Subcortex and Liver

3. Osteopathy: Diagnosis and treatment protocol

The tests used detect the most common clavicular and humeral head dysfunctions and indicate the presence of anterior rotation of the clavicle, and anterior humeral head.

3.1. Anterior rotation of the right clavicle: Treatment

The patient sat relaxed. The practitioner stood behind him and held the right clavicular lateral end with the 2nd and 3rd distal phalanges of their left-hand fingers, while their right hand held the elbow in a backward position. The clavicle was pulled backward, whilst pushing the elbow forward. Then, the clavicular end was held to prevent its anterior rotation and the elbow was pulled backwards. This sequence was repeated three times.

3.2. Anterior humeral head: Treatment

The patient was supine with the right shoulder on the edge of the bed. The practitioner stood close to the patient's right side. The patient's arm was raised by the practitioner's left hand, and the 2nd metacarpophalangeal joint of the practitioner's right hand was placed on the anterior side of the humeral head and, at the same time, the forearm was held in a vertical position with the elbow extended. After joint decoaptation and rebalancing, the practitioner performed a thrust action from above moving downwards and in an outward direction with their right hand.

4. Treatment session

The patient received a total of 3 sessions involving OMT, and acupuncture (with the insertion of 0.25×25 disposable TeWa acupuncture needles into the acupoints, manipulation of the needle until the Deqi was achieved, and needles left in situ for 25 minutes), or bleeding (whereby the skin was disinfected, use of BAYER Microlet silicon-coated sterile lancets and surgical gloves).

After OMT and acupuncture, cupping or bleeding of the distal and local points, improvement in pain and range of motion was assessed. This procedure enables the evaluation of which maneuvers and points are effective. At the same time, the patient realizes that his condition can be

successfully treated and compliance increases.

4.1. Results

Pain was assessed by the patient using the VAS before treatment, after the 1st two sessions, and after the 3rd session where the scores were 8, 4, and 1, respectively. The follow-up, two weeks after the 3rd session, revealed a VAS score 1. The patient did not need further treatment.

Discussion

Acupuncture and osteopathy are evidence-based effective treatment options, the potentials of which are widely recognized by the scientific community [11-21]. The combination of acupuncture and osteopathy treatment has been reported to increase treatment effectiveness in terms of pain reduction and number of sessions required [22].

The Mazzanti AcuOsteo Method maximizes the effectiveness of treatment for musculoskeletal pain by employing a therapeutic approach to increase practitioners' awareness of point selections. Acupoints and therapeutic options may be well known to practitioners, but the process of acupoint selection and their use is something that should not be taken for granted. There are several different schools of thoughts and ways of teaching acupuncture. Consequently, the therapeutic approach proposed, i.e., using less-common acupoints and often-overlooked treatment protocols, may be interesting and, to some extent, innovative.

The Mazzanti AcuOsteo Method offers perspective on pain management: it is a protocol of diagnostics, and a therapy integrating Western medicine and traditional Chinese medicine, including osteopathy. A point of strength, which is worth highlighting here, is that such a combined approach provides an effective and quick therapeutic strategy to manage severe pain, either acute or chronic, and get immediate relief during the therapeutic session. With the Mazzanti AcuOsteo Method, the therapeutic protocol of "Five Options" for acupuncture treatment aims to provide immediate effective treatment and the frequency ranges according to the patients perception of intensity of pain which is classified using the VAS which ranges from 0 to 10, where a score of 0 indicates no pain, 1 to 3 mild pain; 4 to 6 moderate pain; 7 and above indicates severe pain [10]. If pain is reported to be a VAS score 7 and above, treatment sessions are scheduled twice a week, otherwise once a week. After 5 to 6 sessions, it is anticipated that a patient's pain would be rated as a VAS score of 3 or below: if rated as 0 or 1, treatment is stopped, whereas if rated 2 or 3, another 2 sessions are scheduled once a week until the VAS score is 0 or 1. If pain is rated as moderate i.e., a VAS score between 4 to 6, then treatment should continue for another 4 sessions to be administered once a week, until the VAS score is 0 or

1. When the patients pain has a VAS score 0 or 1, a follow-up session is scheduled after 2 weeks. The kind of condition treated and the patient's overall health status should be assessed to decide whether treatment should be prolonged to maintain the result obtained or avoid pain recurrence.

Compared with conventional Western medicine, both acupuncture and OMT offer a safe and effective way to treat MSK pain without the need to administer drugs, avoiding any potential side effects due to the interactions of drugs. Needless to say, only well-trained acupuncture experts with training in osteopathy can administer both techniques at the same time to follow the protocol described above.

Conclusion

The combination of acupuncture and osteopathy is an excellent proposition to treat musculoskeletal conditions/diseases of the upper and lower limbs, either sports-related or subsequent to repetitive or excessive use. The results presented in this brief communication as a case study show that a patient affected by MSK pain had complete resolution of symptoms and could resume their previous activities. Outcomes in terms of pain reduction and length of treatment showed that treatment of musculoskeletal pain with a combined approach was effective.

Patent Information

The "Mazzanti AcuOsteo Method" was registered with the European Union and patented as a treatment option for MSK pain under the no. 018618127 on April 13, 2022.

Conflicts of Interest

The author has no conflicts of interest to declare

Funding

None.

Ethical Statement

This research did not involve any human or animal experiments.

Data Availability

All relevant data are included in this manuscript.

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