



ORIGINAL RESEARCH PAPER

Environmental Science

ACUPUNCTURE OF THE WRIST-ANKLE MICROSYSTEM FOR SHOULDER PAIN CONTROL

**KEY WORDS:** acupuncture, microsystem wrist-ankle, analgesia, ombralgia

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ABSTRACT

**Background:** shoulder pain is quite prevalent. The pain control is crucial to restore the individual quality of life. Acupuncture is an effective and inexpensive technique for pain control. Goal: The objective of this study was evaluate and report clinical cases treated with acupuncture-ankle cuff technique (TPT) for analgesia in chronic ombralgias. **Methodology:** seven patients treated at the orthopedic clinic underwent dry needling (acupuncture) points of the wrist-ankle microsystem TPT. The evaluation of pain before and after intervention was performed by an independent orthopedic (blind) by a visual analog scale (VAS). The function was assessed using the Constant scores and UCLA. Statistical data were analyzed using the Student t paired and Two-sided Kolmogorov-Smirnoff. **Results:** All patients reported significant improvement in pain. **Conclusion:** The TPT technique is effective for pain control in the shoulder.

INTRODUCTION

Shoulder pain is the second most prevalent complaint in specialty outpatient osteoarticular and can affect 15 to 25% of the population, with the incidence increasing age. The shoulder pain is the third orthopedic sole cause removal of working activity, accounting for 5% of the Brazilian pension benefits system 2011. A diverse range of pathologies may be involved, such as rotator cuff tendon injuries in various degrees lesions labral, osteoarthritis, adhesive capsulitis, tendinitis, myalgia, scapula-thoracic imbalance among others. The rotator cuff injury, most prevalent cause of shoulder pain in patients over 60 years, can affect 40% of people above 60 years, reaching 85% prevalence in population above 75 years.

The shoulder is a particular joint, formed by the humerus, scapula and clavicle, the glenohumeral and acromioclavicular joints are the main sources of pain. The joint capsule and is coated by the set of three gleno-humeral ligament (upper, middle and lower). A fourth set of tendons (supraspinatus, infraspinatus, subscapularis and teres minor) forming the rotator cuff and maintain the humerus against the glenoid cavity, allowing the pivot movement. Since the joint, the deltoid muscle in its three portions (anterior, middle and posterior) is the leading shoulder of the engine.

The great complexity of the joint causes it to be home to several diseases, which generate pain and joint stiffness as major complications. Initial treatment is conservative and essentially involves analgesia, physical therapy, kinesitherapy, postural rehabilitation, acupuncture, among other treatments. Surgical treatment is indicated in specific and objective cases mainly functional optimization and should be associated with conservative treatment for pain control.

Acupuncture is presented as effective treatment of shoulder pain. The use of needles for medical treatment in China dates back the sixteenth century BC and evolved over the centuries. Based on energy rebalance the body (Qi), Traditional Chinese Medicine (TCM) believes that the conditions are from an energy imbalance between agencies and between the body and the environment, which translates into several signs and symptoms, including the ache. The use of filiform needle applied at specific points with exact functions allows free flow of Qi and restoring energy by treating the disease and relieving symptoms.

Acupuncture includes several techniques, among them the Technical Fist-and-ankle (TPT). Described by Zhang Xinshu, the technique is the introduction of needles into subcutaneous longitudinal angle of approximately 30 facing the focus of pain, in one of six specific points for each body region. The objective TPT mainly pain control, and can be supplemented by other methods and techniques to MTC.

The aim of this study was evaluate and report clinical cases seen with the wrist-ankle acupuncture technique for analgesia in chronic ombralgias.

2. METHODOLOGY

Seven patients complaining of pain in the shoulder were recruited for the study. Tooth these, four had already done acupuncture for other complaints. Three had never done acupuncture. The main complaint was shoulder pain for at least 60 days, with no history of trauma, no diagnosis of early osteoarthritis. All seven patients were making use of analgesics or anti-inflammatory for at least a week. Three were doing physical therapy.

Patients were evaluated at the clinic of HUGG-UNIRIO and diagnosis according to TCM established in parallel to the Western diagnosis. It was indicated treatment by introducing sterile disposable 30-32 gauge stainless steel needles 4 cm in points 4, 5 or 6 or combination of two or three, located on the handle ipsilateral to the pain introduced 3 CUN joint in an angle of 30 ° facing cephalic direction.

Pain was measured by the Visual Analogue Pain Scale (VAS), which was asked the patient to locate the intensity of their pain on a scale of colors and symbols. The functional evaluation was performed by the UCLA test for measurement of the arc of active and passive motion. Tests were performed prior the introduction of needles and 5 minutes after the placement of the needles TPT. Finally, treatment by acupuncture was complemented with the use of other issues facing other complaints, and three case, use of Mocha. Upon completion of treatment, the patient was asked to reassess the pain.

Name	Age	Sex	Shoulder	BMD
MSS	53	Fem	Dir	tendonitis
LGM	62	Fem	Dir	tendonitis
AGM	73	Men	Dir	MRL
MCPV	63	Fem	Left	MRL
MSSR	64	Fem	D + E	MRL
BMS	47	Fem	Dir	tendonitis
ASCD	36	Fem	Dir	Capsulie

Data were subjected to Fisher Tests and T-student through the MedCalc program for iOS5. Because it is simple variable, the data were considered in block compared, providing a temporal and individual overview of the object studied.

3. RESULTS

All patients had pain relief as shown in the table. Five patients improved arc passive movement, although the functional gain was

not significant. The perception of analgesia was immediate, and optimized over time. After completion of the treatment, analgesia was more significant and efficient. Initially classified as "Intense" in all seven patients, the pain was considered be "moderate" after use of the technique in 6 patients (85%) and reached the intensity "light" end of treatment in four (57%). A significant reduction in pain in 5 cases.

The variation of motion is small, although there was improvement in all cases. The range of motion depends on the pain, which limits the deployment, but also the intrinsic stiffness associated with morphological and functional alteration of the capsule and tendons, so that this variable is susceptible to multiple factors beyond pain control.

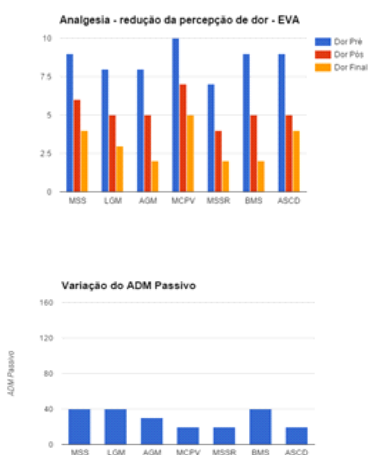
Name	Pain bef.	Pain After	Pain Final	Variation Range of Motin (ROM)
MSS	9	6	4	40
LGM	8	5	3	40
AGM	8	5	2	30
MCPV	10	7	5	20
MSSR	7	4	2	20
BMS	9	5	2	40
ASCD	9	5	4	20

**DISCUSSION**

The pain shoulder is frequent and often disabling. There are several treatment options available in the medical literature. Among them, acupuncture, ancient technique has been shown to be effective for pain control. In acupuncture, the technique TPT appears as effective in optimization of analgesia, allowing greater comfort to patient undergoing treatment.

In this study we observed that in seven cases treated at the clinic of IARJ complaining of pain in the shoulder, observe pain relief in all, with significant results in more than half of cases. The perception of pain intensity was greatly reduced after using the cuff technique and supplemented by additional ankle-acupuncture points, acupuncture show that is suitable for pain control in musculoskeletal disorders, especially in the shoulder.

**5. CONCLUSION**



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