

106 - TECHNIQUE OF MOXIBUSTION FOR RHEUMATOID ARTHRITIS: A CASE STUDY

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INTRODUCTION

The Rheumatoid Arthritis (RA) is a type of inflammatory polyarthritis, characterized by a variable stroke, but often prolonged, with remissions and exacerbations of joint pain and increase the volume that often lead to progressive deformities and can even lead to permanent disability (SALTER, 2001).

The cause is unknown, though it is quite possible that many differences agents arthritogenic stimulate the immune response in genetically susceptible individuals. In the list of possible candidates for causal agents are various exogenous infectious agents, certain connective tissue proteins and immunoglobulins altered (SKARE, 2007).

The RA is relatively common. Surveys have shown that approximately 1,5% of the adult population suffers from this disease. Women are affected three times more than men and, although the disease can begin at any age, the critical period of onset is between 20 and 40 years. Peripheral joints, especially the hands, are the most frequent sites of initial involvement of the RA (SALTER, 2001).

Until now there is no cure for this disease and treatment is directed at relieving the clinical characteristics and functional activity in obtaining maximum possible. The treatment depends on the stage and severity of disease and is based on the findings of examinations. The principles are followed: patient education, drugs for pain relief, control of inflammation (THOMSON, SKINNER and PIERCE, 1994).

Traditional Chinese Medicine (TCM) is so effective that it originated thousands of years and matured hundreds of years before Christ, can diagnose and successfully treat the health problems generated by the lifestyle of this century, which is light years away from the society they lived in the former peasants, in which the TCM originated (MACIOCIA, 1996).

The concepts of TCM are directed to study the factors that cause the disease, according to the mode of treating the stages of evolution of the disease process, and especially to studies of prevention methods, in which lies the essence of Chinese philosophy and medicine (YAMAMURA, 1993).

In the TCM, RA is classified as "painful obstruction syndrome" or "disease Bi", that is characterized by pain, abnormal sensitivity and paresthesias, due to external invasion of Wind, Cold and Damp in a frail body. According to TCM, pathological factors converge at the joints after penetrating the meridians causing obstruction of the flow of energy, local stagnation of energy and blood, causing pain. This happens more easily if the joint is weak, malnourished or overloaded (MACIOCIA, 1996).

The moxibustion is a treatment technique used by TCM, where in firing is conducted at a medicinal herb called *Artemisia vulgaris* or *sinensis* which produces a heating with therapeutic effects on the human body. It has the property of heat and through heating, remove obstructions from the meridians, eliminating Dampness and Cold that promoting dysfunctions in the organism (NEVES, 1994).

Moxibustion aims to act on specific areas of large surface, in the treatment of blocking pain, soft tissue injuries and musculoskeletal problems found in knees, hips, shoulders and spine (HOPWOOD, LOVESEY and MOKONE, 2001).

So, this study aimed to verify the effects of moxibustion technique in an individual with Rheumatoid Arthritis.

MATERIALS AND METHODS

The present research is a case study based on the application of the technique of moxibustion in an individual with RA. This study was developed in Physiotherapy Clinic of Universidade Estadual do Oeste do Paraná, Campus de Cascavel.

The case study as a research modality is understood as a methodology or how the choice of an object of study defined by interest in individual cases. aims to investigate a specific case, well-defined, contextualized in time and place, so that we can conduct a thorough search of information to allow her knowledge broad and detailed (AZEVEDO, 2001; VENTURA, 2007).

The individual selected for the research should present the RA diagnosis, O, according to the simplified criteria and reviewed by the American Association of Rheumatology, which are: (1) morning stiffness for at least an hour, (2) arthritis in at least three areas with joint swelling or joint effusion; (3) arthritis of hand joints or at least one area with swelling in the wrist joint, metacarpophalangeal (MCP) or proximal interphalangeal (PIP); (4) involvement and symmetrical swelling of joints, (5) subcutaneous nodules over bony prominences, extensor surfaces or periarticular regions; (6) radiographic changes typical of RA: erosions or bone decalcification in hand or wrist; (7) positive rheumatoid factor (KLIPPEL and DIEPPE, 1994; BÉRTOLO et al, 2007; PEREIRA, 2007).

The individual is considered RA is present at least four of the above criteria, and the criteria of (1) through (4) must be present for at least six weeks.

In order to evaluate the selected patient you were asked some questions in the first session and the last session attendance, about the affected joints and available on a day-to-day. For measurement of edema, used a simple tape measure aimed at monitoring changes in articular perimeter of the affected joints. The top and bottom edge of the joints were measured. Graduation for the pain was applied to the Visual Analog Scale (VAS). The pain and swelling were evaluated throughout the beginning of the sessions.

To applying moxibustion technique was used a stick of *Artemisia vulgaris*, that was lit and approximate skin three inches away from this, without at any time it stops. The points to be stimulated were periarticular to promote a warming in the joint.

The treatment consisted of ten sessions of moxibustion, performed at a frequency of twice weekly with three and four days apart, respectively between each session.

RESULTS AND DISCUSSION

The patient studied was female, 50 years old and had active RA. According to the American Association of Rheumatology diagnostic criteria presented (1) to (4), and has presented the criterion (5). Reports that no other family member have arthritis or other autoimmune diseases.

According to reports from the patient, the RA began abruptly: was sleeping well and woke up the next morning with

severe pain and swelling in both hands. After two years the RA had affected several other joints.

The patient classifies their pain in general as "intense" and type "burning". Lasts an average of four hours a day. Usually the pain worsens with cold and / or humidity, and the time of day that the pain bothers her most is the morning.

The edema occurs mainly in wrists and ankles. Arises when the patient makes a lot of effort or is exposed to cold and humidity. The average duration is one day, but it often reappears.

The patient reports that six years ago appeared rheumatoid nodules on the dorsum of the left hand, but they disappeared spontaneously. Denies any other systemic problems related to RA.

ANALYSIS OF RESULTS

Affected Joints

Affected the joints in patients with RA were the wrists, knees, ankles and big toe, all bilaterally.

Held moxibustion treatment of these eight joints and at the end of the ten treatment sessions, these joints remained highlighted as the most affected, despite having a considerable improvement in pain.

The literature states that RA has a preference affect small joints of the hands, feet and wrists, usually in a symmetrical pattern (STROTTMAN, 2000; KLIPPEL and DIEPPE, 1994).

The subtalar joints and talo-navicular are also commonly affected in RA. Synovitis these joints causes pain, stiffness, and sometimes subtalar dislocation. Secondarily, it develops peroneal muscle spasm that promotes a valgus deformity and cause a flattening spastic plantar (KLIPPEL and DIEPPE, 1994).

Disposition in Day-to-Day

We asked the patient about how was your disposal from day to day, the answer was, "I feel unwell, listless. I'm always tired." At the end of the ten sessions of moxibustion response was, "It has improved a lot. I feel more prepared and less fatigue".

In literature, we found that in RA, as well as a number of joints affected, there may also be signs of generalized weakness and low energy (Gouveia, 2008).

Fatigue, also known as asthenia, is a symptom that can arise after a journey overworked or after an illness that has consumed much of the body's energy reserves. Moxibustion is excellent in treating fatigue, because, according to TCM it is due to deficiency of energy purchased and insufficient circulation of this energy in the meridians. The moxa tonifies Qi and blood, increasing energy gained (INADA, 2007).

Joint Swelling

To verify the effect of moxibustion in joint swelling, were measured at eight joints most affected, ie wrist, big toe, knee and ankle, all bilaterally, in its proximal and distal portions, at the beginning of all ten sessions. For statistical purposes, there was an average of all joint measures taken in each session. It can be observed in Table 1 that there was great variability in the values during ten sessions.

Statistical analysis using ANOVA for repeated measures, the values were not statistically significant ($P > 0.05$), other words, there was no significant variation in the perimeter joint over the course of the sessions

Table 1 - Average and Standard Deviation of the Circumference of the Affected Joints (in cm)

Number of session	Measure joint (mean \pm standard deviation)
1	24,00 \pm 6,58
2	23,47 \pm 6,35
3	23,66 \pm 6,53
4	23,13 \pm 6,58
5	23,34 \pm 6,09
6	23,94 \pm 6,32
7	23,97 \pm 6,37
8	23,97 \pm 6,37
9	23,56 \pm 5,91
10	23,56 \pm 6,14

In the Eastern view, most practitioners agree that the three factors Wind, Cold and Damp are present in all cases of chronic painful obstruction, however, each case can be distinguished according to the predominance of one factor over another (Maciocia, 1996). In patient studied, apparently predominates Moisture Bi syndrome because it is characterized, besides the pain, swollen joints.

According Wenbu (1993), if the humidity stagnates in the meridians and joints, this prevents the circulation of Yang leading to numbness and hyposensitivity articular syndrome characteristic of Bi humidity.

Considering the literature with regard to ERM, the patient should have improved in this regard, but it did not. It is believed that more sessions were necessary because of the chronicity of the case, as there are many deformities and the very structure of the mechanical joint is compromised, resulting in edema. Still, the treatment took place in the winter, where cold and moisture are more present, hindering the improvement, according to TCM.

Degrees of Pain in Every Relationship

The joints most commonly affected by RA in this patient were treated in ten sessions with the technique of moxibustion.

The patient was asked to grade the intensity of pain of each of the eight joints affected early in each of ten sessions. The notes of the VAS range from 0 (no pain) to 10 (maximum pain).

For statistical analysis, we performed the average grade of all joints in each session. The averages listed in Table 2, we note that there was a great variation in the amounts of pain every session.

The ANOVA for repeated measures showed a significant difference ($P < 0.05$) values over the course of the sessions. Comparing the session (1) with the session (10), there is reduction of pain was statistically significant.

Table 2 - Average and Standard Deviation Scale Pain in Affected Joints

Number of session	Note (mean \pm standard deviation)
1	4,63 \pm 0,92
2	2,88 \pm 0,64
3	3,25 \pm 2,25
4	3,63 \pm 1,51
5	3,75 \pm 0,71
6	4,38 \pm 1,85
7	5,63 \pm 2,33
8	5,63 \pm 2,62
9	3,50 \pm 1,20
10	2,00 \pm 1,31

Moxibustion is indicated for the treatment of many cases, particularly those diseases caused by Wind, Cold and Damp as already mentioned several times in this study.

The moxa acts transmitting heat to the meridians, uniting them and also activates the circulation of energy and blood and eliminates Dampness and Cold (WENBU, 1993).

According Hicks and Gerber (2002), the application of heat in RA joints (both surface as deep) may elevate the pain threshold after application. The heat produces sedation and analgesia by acting on the free nerve endings of peripheral nerve fibers and range of muscle spindles.

In Chart 1, we can see that there was a peak of pain in sessions 7 and 8. This probably happened because this time the weather was cold and rainy weather, factors responsible for the worsening of symptoms of RA in patients. Remember that the treatment happened in winter.



Graph 1 - Graph of Averages Notes will Assigned Pain in Joints Treated by All Session

Joints occurs greater perception of stiffness and worsening of AR in winter, where a lot of pain and swelling occurs, reaching compromise movements (MELO, 2008). For Andrade (2007), there is a scientific explanation to prove the worsening of RA in the cold, but some factors actually increase pain sensation such as vascular constriction, which decreases blood circulation and sensitivity in some patients to cold. As for Valente (2006), the cold people get more contracted muscles, which can lead to worsening pain. It also says that the cold increases depression and depression causes pain.

FINAL REMARKS

With this study it was concluded that the technique of moxibustion was beneficial in the treatment of patients studied, affected by Rheumatoid Arthritis, improving your disposal from day to day and helping to reduce joint pain.

With respect to joint swelling, no significant differences after treatment. And the joints most affected remained the same at the end of treatment.

Something unexpected and has not been investigated, was that the patient report the disappearance of headaches after the end of each session, showing that despite the local application of moxibustion, there was a systemic action.

It is noteworthy that the treatment proposed here, worked moxibustion in a timely manner, in periarticular regions, not seeking energetic rebalancing, if possible to do when using acupuncture points. Still the patient treated had significant improvement in joint pain, reducing headaches and was more willing to end of treatment.

The case study is not intended to generalizations, but serves as a foundation for future research in the same direction, and these are always needed. It is suggested the development of further studies with a larger number of individuals and use of control groups. Therapies longer would also be interesting cases to a greater chronicity.

A further deepening scientific treatments through oriental medicine can bring up invaluable contributions to Western medicine, serving as the basis of treatment in some cases and in other adjuvant, and always will be the big beneficiaries patients.

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TECHNIQUE OF MOXIBUSTION FOR RHEUMATOID ARTHRITIS: A CASE STUDY

ABSTRACT

A medicinal herb called mugwort is burned, which produces a therapeutic Rheumatoid arthritis is an inflammatory polyarthritis with exacerbation of pain and articular volume leading to progressive deformities and even permanent disability. In Traditional Chinese Medicine rheumatoid arthritis is classified as a "painful obstruction syndrome" characterized by pain, abnormal sensibility and paresthesia due to external invasion of Cold, Wind and Humidity in a body of fragile constitution. Moxibustion is a technique of treatment used in Chinese Medicine, in which heating effect in the human body, removing meridian obstructions. The goal of this study was to determine the effects of the moxibustion technique in a subject suffering from Rheumatoid Arthritis. This is a case study where a patient diagnosed with Rheumatoid arthritis was submitted to ten sessions of moxibustion. At the beginning of each session the edema was measured and the joint pain was graded with the Visual Analogue Scale. At the initial and final sessions the patient answered questions that were used for further analysis. At the end of the treatment there was a statistically significant improvement on the joint pain and also an improvement in the day-to-day disposition. Regarding the joint edemas and the swollen joints there were no significant changes.

KEYWORDS: rheumatoid arthritis, moxibustion, acupuncture.

TECHNIQUE DE MOXIBUSTION SUR ARTHRITE RHUMATOÏDE: UNE ÉTUDE DE CAS

RÉSUMÉ

L'arthrite rhumatoïde est une polyarthrite inflammatoire à une exacerbation de la douleur et de l'enflure qui conduit à des déformations articulaires progressives et même une incapacité permanente. En médecine traditionnelle chinoise, l'arthrite rhumatoïde est considérée comme un «syndrome d'obstruction douloureuse», caractérisée par des douleurs, des paresthésies et une sensibilité anormale à cause de l'invasion extérieure de vent, froid et humidité dans un corps fragile. Une moxibustion est une technique de traitement utilisée dans la médecine chinoise, dans laquelle est effectuée la cuisson à une plante médicinale appelée armoise, qui produit un effet de chauffage thérapeutique sur le corps humain, l'élimination des obstructions des méridiens. Cette étude a visé à déterminer les effets de la technique de la moxibustion chez un individu souffrant d'arthrite rhumatoïde. Il s'agit d'un cas où une patiente atteinte d'arthrite rhumatoïde a subi dix sessions de moxibustion. Au début de chaque session, l'œdème a été mesurée et des douleurs articulaires ont été marquées par l'échelle visuelle analogique. Lors de la séance initiale et finale, le patient a répondu à des questions qui ont été utilisées pour une analyse ultérieure. À la fin du traitement il y a eu une amélioration statistiquement significative de la douleur articulaire et l'amélioration de la disposition physique du jour le jour. En ce qui concerne les œdèmes articulaires et les articulations enflées n'a eu aucun changement significatif.

MOTS-CLÉS: arthrite rhumatoïde, moxibustion, acupuncture.

MOXIBUSTIÓN TÉCNICA PARA LA ARTRITIS REUMATOIDE: UN ESTUDIO DE CASO

RESUMEN

La artritis reumatoide es una poliartrosis inflamatoria con exacerbación del dolor y la inflamación que lleva a deformidades en las articulaciones progresista e incluso incapacidad permanente. En la medicina tradicional china, la artritis reumatoide se clasifica como un "síndrome de obstrucción dolorosa", que se caracteriza por dolor, parestesias y sensibilidad anormal debido a la invasión externa de viento, frío y humedad en un cuerpo frágil. La moxibustión es una técnica de tratamiento utilizada en la medicina china, en que se realiza la cocción se realiza a una planta medicinal llamada artemisa, que produce efectos de calentamiento con efectos terapéuticos sobre el cuerpo humano, la eliminación de las obstrucciones de los meridianos. Este estudio tuvo como objetivo determinar los efectos de la técnica de la moxibustión en un individuo con artritis reumatoide. Este es un caso en que un paciente con artritis reumatoide se sometió a diez sesiones de moxibustión. Al comienzo de cada sesión, el edema se midió y el dolor en las articulaciones se anotó con la Escala Analógica Visual. En la sesión inicial y final, el paciente responde a las preguntas que se utilizaron para su posterior análisis. Al final del tratamiento se observó una mejora estadísticamente significativa en el dolor y la mejora en la prestación de día a día. Con respecto a los edemas articulares afectadas y las articulaciones hinchadas no hubo cambios significativos.

PALABRAS CLAVE: artritis reumatoide, moxibustión, acupuntura.

TÉCNICA DE MOXABUSTÃO PARA ARTRITE REUMATÓIDE: UM ESTUDO DE CASO

RESUMO

A Artrite Reumatóide é uma poliartrose inflamatória, com exacerbações de dores e aumento de volume articular que conduzem a deformidades progressivas e até a uma incapacidade permanente. Na Medicina Tradicional Chinesa, a Artrite Reumatóide é classificada como uma "síndrome de obstrução dolorosa", caracterizada por dor, alteração de sensibilidade e parestesias devido à invasão externa de Vento, Frio e Umidade em um corpo de constituição frágil. A moxabustão é uma técnica de tratamento usada pela medicina chinesa, na qual é realizada a queima de uma erva medicinal chamada artemísia, que produz um aquecimento com efeitos terapêuticos no corpo humano, removendo obstruções dos meridianos. Este estudo teve como objetivo verificar os efeitos da técnica de moxabustão em um indivíduo com Artrite Reumatóide. Trata-se de um estudo de caso, onde uma paciente com diagnóstico de Artrite Reumatóide foi submetida a dez sessões de moxabustão. No início de cada sessão o edema foi mensurado e a dor articular foi graduada com a Escala Visual Analógica. Na sessão inicial e final, a paciente respondeu questões que serviram para posterior análise. Ao término do tratamento observou-se melhora estatisticamente significativa na dor articular e melhora na disposição do dia-a-dia. No que se refere aos itens edema articular e articulações acometidas não houve alterações relevantes.

PALAVRAS-CHAVE: artrite reumatóide, moxabustão, acupuntura.