

105 - MOXIBUSTION: A REVIEW OF THE LITERATURE

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INTRODUCTION

Acupuncture is an ancient therapeutic method, used for nearly five thousand years. It emerged in China, was later incorporated into the therapeutic armamentarium of medicine in other Eastern countries such as Japan, Korea and Vietnam. The word acupuncture comes from the Latin, being that *acus* means needle and *punctura* means punching. It regards to the insertion needle through the skin into the underlying tissues in different depths and in strategic points in the body to produce the wanted therapeutic effect (MACIOCIA, 1996).

The Chinese, over thousands of years, described about a thousand acupuncture points, of which 309 were classified in twelve main groups. All points that belong to one group are connected by a line unobservable on body surface called meridian. Are described twelve main meridians that control the lung, large intestine, stomach, spleen – pancreas, heart, small intestine, bladder, kidney, pericardium (or circulation/sex), triple burner, gallbladder and the liver. The acupuncture points along these meridians affect the organs or viscera mentioned, but not necessarily same way. For the Traditional Chinese, our organism is shaped of matter and energy and justly the energy part, the vital strength or Qi that circulate these meridians. For them, all diseases would be a consequent disturbance of the circulation of Qi (YAMAMURA, 2001).

In Traditional Chinese Medicine (TCM), there is a theory that considers that nature is constituted of five basic elements: wood, fire, earth, metal and water, existing among them a relationship of interdependence and inter-restriction creating a state of constant movement. The elements generate mutually in follow order: wood generates fire; fire generates earth; earth generates metal; metal generates water; water generate wood, closing the cycle (XINNONG, 1999).

TCM includes, further acupuncture, massage techniques (Tui-Na), breathing exercises (Chi-Gung), nutritional guidance (Shu-Shieh) and the Chinese pharmacology (drugs of animal, vegetable and mineral) (ALTMAN, 1997).

The treatment by acupuncture aims, to conserve health, preventing diseases, to treat sicknesses already installed, correcting the failures of perfect fluency energy, getting the balance (MACIOCIA, 1966).

Acupuncture can be applied of several ways, through of needles (technique most known and disclosed), laser, electrical and light stimulations, of the use of suckers, magnets, massage and moxibustion also.

Moxibustion is a therapeutic method that aims to use certain substances or herbs to heat acupuncture points or areas of the body will be treated. The heat resultant from this process produces stimuli that regulate the physiological functions, through the meridians. The feedstock most used to make the moxa is the leaf of the plant *Artemisia vulgaris*, which owns property anti-inflammatory, healing, disperses cold and dampness, regulates the circulation and the energy. There are a lot of techniques for use the moxibustion, since application lighted cones put on points or selected areas, until moxa sticks of several sizes that are positioned on the region to be treated, without touching it (YAMAMURA, 2001).

Therefore, this study aimed, to do a bibliographic review about moxibustion technique, describing the therapeutic action of the herb *Artemisia vulgaris* and reporting some study performed about moxibustion with its correlations scientific.

METHODOLOGY

With respect to the collection of materials, was realized a bibliographic research in the library collection of the Universidade Estadual do Oeste do Paraná – Unioeste, and a search in systems, Medline, Bireme, CAPES, Pubmed and Cochrane, using the follow descriptors, “moxa”, “moxibustion”, “acupuncture” and “artemisia”. Besides the research in private collections.

The bibliographic research is elaborate based on previously published material, due of previous research in printed documents, such as books, journals, articles, theses, magazines, so on., aiming to analyze several position about particular subject (GIL, 2010; LAKATOS, 2010).

MOXIBUSTION

Moxibustion is a treatment technique used by TCM, and a way of application of acupuncture. It consists in burn of medicinal herb called *Artemisia vulgaris* or *sinensis*, which produces a heat with therapeutic effects (NEVES, 1994).

It is speculated that the sources of acupuncture and moxibustion are in China, the stone-age tribes. The moxibustion started being used about in same time that developed the controlled use of fire. The primitive man discovered the comfort of the fire and the casual relief of continuous and localized pain and other kind of pain after touching an incandescent stick. Initially the burn was the combustible materials such as twigs and leaves. Later it was used the charcoal, sticks and then *Artemisia vulgaris*. The *artemisia* was used exactly until the Zhou period (1066-221 a.C.). In ancient times, it was used the direct cauterization through the material in flame that was put directly on the skin, causing blistering and scarring following. The moxibustion was submit in big cones, about size like a hazelnut and for each treatment were made many applications. During the dynasties Jing Tan (618-907 d.C.), introduced the indirect method of moxibustion. In that time the classical medical book “Thousand Requirements of Ducato”, gave details to put the moxi wool on other materials, such as, ginger, salt, garlic and beeswax. During the dynasties Ming (1368-1662 d.C.) prepared the moxi wool loose in shaped stick to the treatment (MACIOCIA, 1996; WENBU, 1993; KIKUCHI, 1982).

The application of moxibustion has two basic purposes: to heat the Qi and the Xue (blood), for treatment of diseases caused by cold and damp and to avoid the penetration these when the Qi vital weakens, as happens in people above 40 years. It is also indicate for situations of energy deficiency in chronic diseases and to people with fragile defense system. The herb often used is the *artemisia*, which serves to eliminate wind, cold and damp and because this it is much used in spring and fall (WEN, 1985; KIKUCHI, 1982).

The heat of the burn of the moxa removes the congestion of blood vessels and moves the Qi and the Xue, that finally

remove the pain. The heating realized by burn of herbs offers an ideal temperature, so provides heat and energy just right to the body (HOPWOOD, LOVESEY e MOKONE, 2001; WENBU, 1993).

The moxa is indicated to anemia, cramps, weakness of the stomach, diarrhea, enteritis, epilepsies, flatulence, gastritis, changes of menstruation, rheumatism and is used like insecticide too. It is indicated still to chronic diseases like rhinitis, bronchitis and asthma, depression, anguish, anxiety, fear, sexual impotence and frigidity, throat inflammation, musculoskeletal pain, psoriasis, acne and eczema (HOPWOOD, LOVESEY and MOKONE, 2001; KIKUCHI, 1982).

The indication of moxibustion will depend people age, their constitution, physical size, gender, sensibility, pathology and if patient is Yin or Yang.

Its contraindications consist don't put the moxi directly in face, because can induce scar. It mustn't be used near orifices, blood vessels, mucosal or sensitive areas, such as eyes. In diabetic patients must take care due diabetic neuropathy. It must avoid the application in abdominal and lumbar region in pregnant women. Lastly, according the TCM, it mustn't be used in diseases caused by heat (HOPWOOD, LOVESEY and MOKONE, 2001).

THE HERB

The *Artemisia vulgaris* is a plant of the family compound, popularly known as artemigem or artemisia. It is a plant of nearly one meter tall and of leaves with a bitter taste and aromatic odor unpleasant. Its produces numerous white flowers and the season harvest in Brazil is from November to December. Its originated in Asia and neutralized almost world. Its constituents are essential oils (cineol and tuiona), flavonoids, tannins, saponins, resins, artemisinin and bitter principles (PANIZZA, 1997).

For use as moxibustion, there is a particular form of transformation of herb. According Kikuchi (1982), the leaves of artemisia have suffer a drying process in the sun, during two to three days, until that be removed 20% to 30% of damp; after is continued the drying in shadow however some days. Then must be carefully tamped in a pestle and sieved to retire all powder. It left then the artemisia fibers, which acquire an aspect of woolly mass of clear yellow color. This material must be preserved in a box in a dry local, because its quality increases measurement as time passes.

Artemisia vulgaris has several therapeutic indications which serve to fabrication of drugs for either internal use or external use. The plant presents analgesic activity, anti-inflammatory, anthelmintic, antibacterial, anti-flatulent, antifungal, appetite stimulant, bile stimulant, depressant of the central nervous system, digestive, diuretic, emetic, expectorant, hemostatic, laxative, sedative, uterine stimulant and vasodilatador. It has also been use in the treatment of the epilepsy, persistent vomiting, convulsion in children, circulatory problems, menopausal complaints, tenuous depression and stress (FETROW and ÁVILA, 2000; TIGMO, GUZMAN and FRORA, 2000).

Using the aqueous extract and chloroform of the *Artemisia vulgaris* leaves, Tigmo, Guzman and Frora (2000), observed that the plant has antihypertensive action, however doesn't have significant effect in the hemodynamic cardiovascular. Franco (2001) observed that the plant also has cinesiol and the tuiona that fight the inflammatory processes, mainly the vaginitis.

As side reaction of the its use, can happen anaphylaxis and contact dermatitis. The artemisia can potentiate the effects of the anticoagulants, should, because this, to be avoided the concomitant use. It is contraindicate to pregnant or infants, as well as for patients with hemorrhagic tendency (FETROW and ÁVILA, 2000).

SCIENTIFIC REPORTS

Scientific research with the moxibustion and the artemisia herb are scarce, nevertheless, is possible to find some studies in this meaning. Below are related some these studies.

According the study of López et al (2011), the moxibustion at acupuncture points was effective to eliminate symptoms of asthma attacks in patients at Emergency Medical Center. Among the symptoms reported by patients contained cough, dyspnea and rales dry, followed of anxiety and expectoration. This was an intervention and prospective study, was carried out with 42 patients diagnosed with asthma attacks by doctor on duty of the Emergency Medical Center, through of a physical examination that detected the clinical manifestations. All patients reported satisfaction with the therapy, and just one patient required pharmacological treatment.

The study of Li Y et al (2004), aimed to check the effectiveness of the acupuncture combined with the moxibustion in the Bell's palsy. The study included 439 individuals, divided in a control group and two treatment groups. The control group was treated pharmacologically, and the treatment groups were treated with acupuncture and moxibustion only or in combination with the farmacos. The symptoms and signs of the Bell's palsy were measured through of the House-Brackmann Scale and by Disability Index, being that the scores were evaluated and determined pre and post treatment. According to the evaluated, there was effectiveness in both groups that received the treatments compared to the control group, but the result was better in group that received acupuncture and moxibustion only, without the administration of drugs.

Brasilino (2005) demonstrated that both the acupuncture as moxibustion were effective in the treatment of the Bi syndromes (according the Chinese medicine are disorders that affect the muscles, tendons and joints), and in the increase of the range of motion of knee extension and flexion. The study included eight individuals over the age of 60 years, divided in two groups of four participants, where the first group was treated with acupuncture and the second with moxibustion. To the comparative analysis was used the Pain Scale Alpha-Numeric Borg, which analyses the pain level, and the goniometry, which analyses the joint range. In the first group, in 50% of participants the pain decreased from eight to one the three points in the scale and in 50% it decreased from three to zero. In the second group, in 75% of the participants the pain decreased from eight to two points in the scale and in 25% it decreased from three to zero. In the goniometry, the degrees of flexion and extension had increased both the techniques that ranged from 10 to 15 degrees. Thus, in this study, the moxibustion showed more effective than acupuncture.

Lastly, the research by Cardini and Weixin (1998), demonstrated that among the pregnant primigravid of 33 weeks with fetus in pelvic presentation, the treatment with moxibustion during one to the two weeks was significantly effective to increase the fetal activity and consequently the movement to the cephalic position during and after the period of the treatment until the parturition. In the research was studied 260 pregnant primigravid with 33 weeks gestation and with diagnosis of the fetus in pelvic presentation. Werek divided randomly in two groups, 130 to the group of moxibustion and 130 to the control group. The group of moxibustion was stimulated with moxa in point B67 during seven days and if the fetus persisted in the same position, was done more seven days the treatment. In the control group, wasn't made any intervention until the 35th week. During the 35th week of pregnancy, 98 of the 130 fetus of the moxa group were in the cephalic position, compared, in control group, of the 130 fetus, 62 were in the cephalic position, being that adopted the position naturally. After the 35th week until the parturition, didn't have increased in the number of fetus in the cephalic position to the moxa group, however, to the control group 81 fetus in the total were in the cephalic position. Thus, despite the small difference during the gestation, the fetus stimulated by moxibustion adopted the cephalic position in larger number.

FINAL CONSIDERATIONS

From the study realized, it can be to consider that the moxibustion, associated or not the others means, is more a ally important therapeutic to the treatment of several pathologies.

Moxibustion, while TCM technique, basically has the function of to heat the meridians, dispersing cold, the wind and the damp, to regulate the blood and energy circulation, as to act to reduction of pain, inflammation and healing.

Artemisia vulgaris, herb used in the making of the moxa, has analgesic action, anti-inflammatory, antibacterial, digestive, diuretic, expectorant, laxative, antidepressant and antihypertensive, among many other indications. The therapeutic action of the herb, associated to the heating and the stimulation of the acupuncture points is that brings the final effect of the moxibustion technique.

Despite its great contribution since the antiquity for the treatment of the various disturbances, even, as it was possible noted through this review, has few current studies in the area. The literature about the subject is still restricted to the Chinese Medicine Treated and the scientific research are scarce.

However, it was possible through this study, to collect many informations about of the moxibustion technique, and it is suggested more and urgent studies about this subject, already that in the clinical practice it proves extremely effective, bringing great contributions in the therapeutic of the patients. With more scientific studies, sure the moxibustion would be more disclosed and more people would benefit from the technique.

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MOXIBUSTION: A REVIEW OF THE LITERATURE**ABSTRACT**

Traditional Chinese Medicine is the art of preventing and treating diseases, through natural means. Originated in China there are about five thousand years and it has several therapeutic resources, but the most known are the Acupuncture, the Phytotherapy and the Moxibustion. Moxibustion is a therapeutic method which aims to use certain substances or herbs to heat acupuncture points or areas of the body to be treated. The heat resulting from this process produces stimuli that regulate the physiological functions, through the meridians. The feedstock most used to make the moxibustion is the leaf of the plant *Artemisia vulgaris*. There is a major lack of bibliographic materials that could support the research with moxibustion. Therefore, this study aimed to do a bibliographic review about the moxibustion technique, describing the therapeutic action of the herb *Artemisia vulgaris* and reporting some studies about the moxibustion with scientific correlations. Through of the study observed that the literature about the subject restricted to the Treated Chinese Medicine and the scientific research are scarce. However, it was possible through this review, gather a lot of informations about the technique of the moxibustion, and suggest more urgent studies about this subject, to elucidate further the technique.

KEY-WORDS: moxibustion, artemisia, acupuncture.

MOXIBUSTION : UNE RÉVISION DE LA LITTÉRATURE**RÉSUMÉ**

La Médecine Traditionnelle Chinoise est l'art de prévenir et traiter les maladies par des moyens naturels. Originnaire de Chine environ cinq mille ans et a beaucoup de ressources thérapeutiques, mais les plus connus sont l'Acupuncture, la Moxibustion et la Phytothérapie. La moxibustion est une méthode thérapeutique qui vise à utiliser certaines substances ou d'herbes pour chauffer les points d'acupuncture ou les zones du corps à traiter. La chaleur résultant de ce procédé produit des

stimulus qui régulent les fonctions physiologiques à travers les méridiens. La matière première utilisée pour fabriquer davantage le moxa est une feuille de la plante *Artemisia vulgaris*. Il ya un grand manque de matériel bibliographique qui pourrait soutenir la recherche avec la moxibustion. Par conséquent, cette étude a visé à faire une revue de la littérature sur la technique de la moxibustion, décrivant l'action thérapeutique de l'herbe *Artemisia vulgaris* en relatant quelques études réalisées sur la moxibustion et leurs corrélations scientifiques. Atravers l'étude on a noté que la littérature sur le sujet est limitée aux traités de médecine chinoise et les recherches scientifiques sont rares. Toutefois, il a été possible par cette révision, recueillir beaucoup d'informations sur la technique de la moxibustion, et on suggère plus et des études urgents sur le sujet, pour élucider la technique.

MOTS-CLÉS: moxibustion, artemisia, acuponcture.

MOXIBUSTIÓN: UNA REVISIÓN DE LA LITERATURA RESUMEN

La medicina tradicional china es el arte de prevenir y tratar las enfermedades por medios naturales. Se originó en China hace unos cinco mil años y tiene muchos recursos terapéuticos, pero los más conocidos son la acupuntura, la moxibustión y fitoterapia. La moxibustión es un método terapéutico que tiene como objetivo utilizar determinadas sustancias o hierbas para calentar los puntos de acupuntura o zonas del cuerpo a tratar. El calor resultante de este proceso produce estímulos que regulan las funciones fisiológicas a través de los meridianos. La materia prima utilizada para hacer aún más la moxa es una hoja de la planta *Artemisia vulgaris*. Existe una importante falta de materiales bibliográficos que podrían apoyar la investigación con la moxibustión. Por lo tanto, este estudio tuvo como objetivo hacer una revisión de la literatura sobre la técnica de la moxibustión, que describe la acción terapéutica de la hierba *Artemisia vulgaris* y algunos estudios que informan sobre sus correlaciones con la moxibustión ciencia. A través del estudio señaló que la literatura sobre el tema se limita a la medicina china muy tratados y la investigación científica es escasa. Sin embargo, fue posible a través de esta revisión, se reúnen una gran cantidad de información acerca de la técnica de la moxibustión, y sugieren más y urgentes estudios sobre el tema, al fin de esclarecer aún más la técnica.

PALABRAS CLAVE: moxibustión, artemisia, acupuntura.

MOXABUSTÃO: UMA REVISÃO DA LITERATURA RESUMO

A Medicina Tradicional Chinesa é a arte de prevenir e tratar doenças, através de meios naturais. Teve sua origem na China há cerca de cinco mil anos e possui vários recursos terapêuticos, mas os mais conhecidos são a Acupuntura, a Fitoterapia e a Moxabustão. A moxabustão é um método terapêutico que visa utilizar determinadas substâncias ou ervas para aquecer pontos de acupuntura ou áreas do corpo a serem tratadas. O calor resultante deste processo produz estímulos que regularizam as funções fisiológicas, por intermédio dos meridianos. A matéria prima mais utilizada para se fazer a moxa é a folha da planta *Artemisia vulgaris*. Há uma carência muito grande de materiais bibliográficos que embasem as pesquisas com a moxabustão. Desta forma, este estudo teve como objetivo, fazer uma revisão bibliográfica acerca da técnica de moxabustão, descrevendo a ação terapêutica da erva *Artemisia vulgaris* e relatando alguns estudos realizados sobre a moxabustão com suas correlações científicas. Através do estudo se observou que a literatura sobre o assunto se restringe muito aos tratados de medicina chinesa e as pesquisas científicas são escassas. Entretanto, foi possível através desta revisão, reunir muitas informações acerca da técnica de moxabustão, e sugere-se mais e urgentes estudos sobre o assunto, visando elucidar mais a técnica.

PALAVRAS-CHAVE: moxabustão, artemisia, acupuntura.