

## Japanese Acupuncture - Current Research

### *Japanese Traditional Medicine Text (5) – Orthopedic*

#### *Disorders B*

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## **B Low Back and Legs**

### **1. Concerning Acupuncture and Moxibustion for Low back and Legs**

One particular characteristic of Japanese Acupuncture and Moxibustion (Traditional Oriental Medicine) is that each patient is treated as an individual, one by one, based on their unique condition, so an appropriate treatment method, protocol and amount of stimulation is selected, ensuring comfortable and effective treatment sessions. Further, practitioners endeavor to develop a relationship with the patient, the psychological effects of this relationship greatly improve treatment efficacy. From the initial greeting at the clinic to the medical interview and exceptionally comfortable acupuncture and moxibustion treatment, the high quality of care naturally touches the patient. Japanese traditional medicine's significant efficacy depends on maximizing the patient's natural healing power. To elicit and maximize the patient's natural healing potential, the real goal of acupuncture and moxibustion treatment, the practitioner's attitude, word choice, friendliness and ways of touching the patient cannot be overestimated. It seems that a combination of treating a wide variety of patients and conditions utilizing the above mentioned favorable circumstances, over many years, contributes to the development of excellent Acupuncture and Moxibustion practitioners.

For the past 30 years, medical research has been underway, focusing on the objective effects of physical stimulation in the fields of health science. As a result, Evidence-Based Medicine (EBM) has necessarily become the gold standard for scientifically valid health-related research protocols.

Currently, Randomized Controlled Trials (RCTs) provide the highest level of reliability for high-quality epidemiological studies targeting a specific group of people and represents a way to make recommendations for treatment methods, protocols and research topics. From the perspective of Acupuncture and Moxibustion treatment the Placebo Effect must be considered carefully, however, it is frequently excluded from consideration in RCTs. Namely, the problem is that the placebo effect is often considered to be identical in all people and studies. Included within modern medicine and treatment effects, the Placebo Effect is often considered "extra" or in "error, however, in traditional medicine it is considered an important treatment effect that should be protected and sought after. Perhaps, it can be considered that the wide variety of placebo effects appearing in the research literature can be accounted for by the variety of treatment styles and experience level of the practitioners. The placebo effect is just one healing mechanism, from the human unconscious, not unlike hormones and the autonomic nervous system, and once qualitatively and quantitatively clarified, could help diversify our treatment models.

In any case, for each practitioner, the placebo effect is different and depending on their technical skill, medical knowledge and humanity the variation will be greatly affected. Further, it is essential to be careful here, do not make the mistake of imagining that the placebo effect is simply elicited by changing your words or manner of speech. This is the first thing practitioners must understand. Nonetheless, considering current world-wide acupuncture treatment effects using RCTs introduced here, obtaining objective evaluation of acupuncture and moxibustion treatments continues to be of paramount importance. However, the current dispute in many RCT papers focuses on the very difficult prospect, "Acupuncture works!". There are many problems that are usually different in each RCT research report: differing reactions to

descriptions of informed consent and screening methods, stimulation methods and amounts, control selection and parameters, treatment points, treatment time, duration of treatment, evaluation of therapeutic effects (outcome), subjects that are more or less reactive to acupuncture, acupuncturists who do not distinguish important aspects of their research. Therefore, naturally there are many different results, so arriving at an all-inclusive conclusion will likely take quite a long time. To that end, here, we are introducing some reference materials focusing on chronic low back pain and osteoarthritis of the knee obtained from recent internationally relevant RCTs. Additionally, we hope to convey some of the most common developments in Japanese research in general, as well as in Acupuncture and Moxibustion treatment in particular.

## **2. Effect of Acupuncture and Moxibustion on Lumbar area and Lower limbs**

In 2009, the National Center for Complimentary and Alternative Medicine (NCCAM), a research center within the National Institute of Health (NIH) in the United States, announced a list of recent RCTs noted for their high level of validity<sup>1)</sup>. As a summary of these results, with respect to general treatment with modern medicine, for example, in cases where drugs are ineffective for chronic low back pain, complementing the protocol with acupuncture and moxibustion must be considered. Further, acupuncture and moxibustion should be considered as effective as pharmaceuticals on their own as they have been shown to increase the efficacy of general treatment when used in conjunction with standard drug protocols. However, it must also be mentioned that ongoing research will of course be required to refine the most effective complimentary methods and techniques. Similarly, concerning osteoarthritis of the knee, definitive conclusions about effective treatment cannot yet be made as most treatments only reduce pain, some life style and functional improvements have been confirmed but removing flawed research

designs, increasing subject numbers (respondents) and assuring consistent protocol parameters must be confirmed before more definite conclusions can be made regarding treatments for osteoarthritis of the knee.

Worldwide trends in RTCs including Japan have been introduced by the Japan Society of Acupuncture and Moxibustion. Several excellent medical commentaries have been published, particularly for osteoarthritis of the knee and low back pain using evidence-based acupuncture and moxibustion<sup>2, 3)</sup>. Among these, RTCs from Germany using acupuncture and moxibustion for low back pain, these researchers used an acupuncture groups and a sham acupuncture group and calculated the significant differences between the test groups. They concluded that, compared to results following modern medical guidelines, better treatment results were observed using acupuncture<sup>4)</sup>. In addition, a United States based RTC report for Osteoarthritis of the knee, divided the subjects into acupuncture and sham acupuncture groups. They found that combining standard medical treatments and acupuncture with health education significantly increased clinical effectiveness<sup>5)</sup>.

Unfortunately, there are few RCTs from Japan on the effects of acupuncture for the Lumbar region and lower limbs. But cited among the current issues are reports on the small number of RCTs and, in contrast, a great variety of reported acupuncture and moxibustion techniques<sup>6)</sup>. Just for your information, the author conducted acupuncture treatment RCTs<sup>7)</sup> on 35 subjects with degenerative osteoarthritis of the knee joint and, although the number of subjects was too small to make a strong conclusion, following statistical analysis comparing pre- and post-treatment symptoms, acupuncture and moxibustion were found to be significantly effective. However, the placebo acupuncture control group also reported improvement following the session, needless to say, we recommend further research to elicit definitive results.

\*note As a rule, RCT criteria require emergency responses to disease, severe conditions often create ethical problems, the limits of appropriate conditions can make them difficult to recommend for such research projects. For these reasons, often researchers select chronic conditions that are not life threatening. For example, severe low back pain or leg pain accompanied by numbness, both chronic conditions of the lumbar region and lower limbs, make more ethically appropriate candidates for research. Further, acupuncture research for osteoarthritis of the knee joint is being conducted around the world. The following criteria for osteoarthritis of the knee provides a clear and easy-to-understand definition of and guidelines for diagnosis: diagnosis by an X-ray image, 45 years of age or older, chronic persistent and relatively localized pain and stiffness, and valid evidence that this pain is negatively influencing the patient's quality of life (using a self-administered assessment method such as the (WOMAC)<sup>8)</sup>.

## References

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