

The Experimental Estimation of the Effect on the Body Heat by the Artemisia-Lotion Pad

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Abstract

This paper is performed to find the effects on body heat by stimulating the skin with the heat of a moxibustion cauterizer and the Artemisia-lotion which cause the extension of the blood vessel. The Artemisia-lotion is made by extracting the vasodilator and antioxidant compounds from the Artemisia-CH₂Cl₂ fraction.

The moxibustion cauterizer is constructed with a DC power supply and 3 heating electrodes with PTC(Positive Temperature Coefficients) thermistor.

The stimulation temperature level of the moxibustion cauterizer is 45 - 48 .

We gave the subjects the following stimulating conditions; only heat stimulation, only Artemisia -lotion stimulation, and both stimulations.

The measurement of body heat was performed with a infrared thermography system .

Finally we could estimate the effects of a betterment of circulation of the blood from Artemisia-CH₂Cl₂ fraction.

1. INTRODUCTION

The moxibustion therapy has 2 effects: One is a pharmacological effect of the moxa's vasodilator, the other is a betterment of circulation of the blood by the

moxibustion's thermotherapy.

But the moxibustion therapy has the burnt, fiery, insanitary problems in performing the operation.

In order to get rid of the problems, we have suggested the moxibustion cauterizer with the Artemisia-lotion.

It is performed to find the effect on body heat by stimulating the skin with the Artemisia-lotion to compare with the heat of the moxibustion cauterizer which cause the extension of the blood vessel and a betterment of circulation of the blood.

2. METHODS

The Artemisia-lotion pad is made by extracting the vasodilator and the antioxidant compounds from the Artemisia-CH₂Cl₂ fraction. The Artemisia-lotion pads are 2 types; One is 1.5% Artemisia extract, the other is 7% Artemisia extract. The stimulation spots were the CV4, CV8, CV12, B23 acupuncture points of the Conception Vessel Meridian (CV) and Bladder Meridian (B). The stimulating time was 6 hours.

The moxibustion cauterizer has been constructed with a DC power supply and 3 heating electrodes with PTC(Positive Temperature Coefficients) thermistor which has the mole rates of (Ba_{0.8}Sr_{0.2})_{0.996}Y_{0.004}TiO₃ + 0.5WT

SiO₂% and has the curie point between 40 and 60 . The stimulation spots were the CV4, CV8, CV12 acupuncture points of the Conception Vessel Meridian (CV) and stimulating time was one hour.

We gave the subjects the following stimulating conditions; only heat stimulation, only Artemisia-lotion pad stimulation, and both stimulations.

3. RESULTS

Fig. 1 shows the trunk average temperature of body heat for only the Artemisia-lotion pad stimulation.

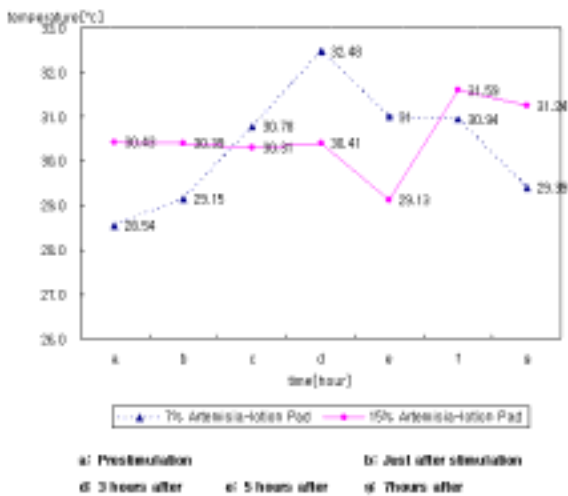


Fig. 1 Only the Artemisia-lotion stimulation

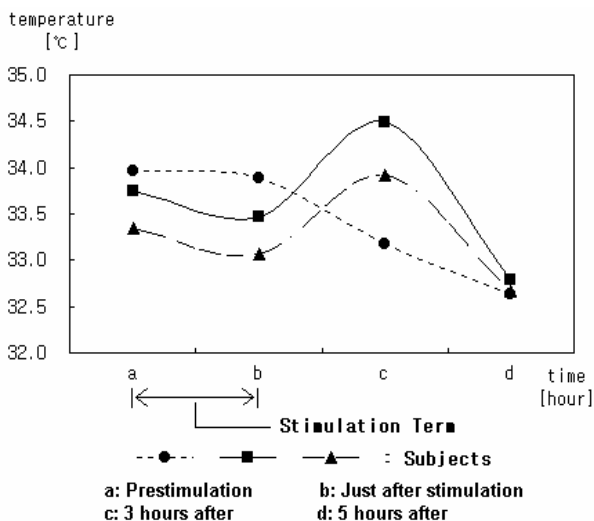


Fig. 2 Only heat stimulation

The body heats of a subject who was stimulated with the Artemisia-lotion pad with 1.5% Artemisia extract were increased by the 1.2 maximum 6 hours after

stimulation. But when he was stimulated with the Artemisia-lotion pad with 7% Artemisia extract, the body heats were increased by the 4.2 maximum 4 hours after stimulation.

Fig. 2 shows the trunk average temperature of body heat for only heat stimulation. The body heats of a group with only heat stimulation were increased by the 0.75 maximum 2 hours after stimulation.

Fig. 3 shows the trunk average temperature of body heat for the both of the moxibustion cauterizer and Artemisia-lotion stimulation. The body heats of a group stimulated with both the moxibustion cauterizer and 1.5% Artemisia-lotion were increased by the 2 maximum after 4 hours.

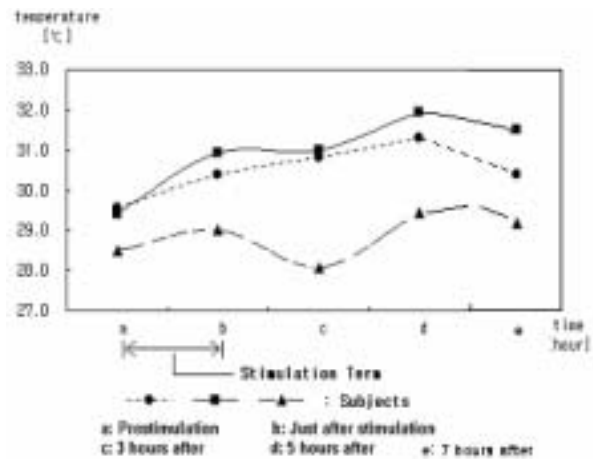


Fig. 3 The moxibustion cauterizer and Artemisia-lotion stimulation

4. CONCLUSIONS

We evaluate that the increase of body heat of the group who were stimulated by the only Artemisia extract pad is due to the effect of the vasodepressor from the Artemisia-CH₂Cl₂ fraction. And also we evaluate that the Artemisia-CH₂Cl₂ fraction is a good vasodepressor.

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