

Moxibustion

With the Premio® 10 moxa.

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Summary. The therapeutic application of heat is a non-invasive practice. It encourages muscle relaxation, decreases stiffness, locally increases blood circulation, stimulates the immunity system. It provides effective pain relief.

It has a very particular place in **Traditional Chinese Medicine**, in which it is called **Moxibustion**.

Key words. Moxibustion - Mugwort – Emission spectrum – Traditional Chinese Medicine

Stimulation through heat

The local application of heat has always been used to relieve pain and organic dysfunction, both in medicine and in "folk recipes".

Research has highlighted the nature of the thermal receptors, and, at least in part, has cast light on the stimulating effect of heat.

The mobilised polymodal receptors transmit information through the nerve pathways, with resultant effects that are

- *local* (such as vasodilatation, extravasation, inflammatory reaction and modification of cell metabolism, etc.)
- *central* (modification of the perception of the pain, integration and reaction adapted to the central nervous system, stimulation of the immune system, etc.)

The energy must nonetheless be transmitted as effectively as possible. That means imparting enough energy to the target without creating collateral damage.

The quality of the heat source is crucial. It must be adapted to the cutaneous and deep thermal receptors.

Black-body emission (with a continuous spectrum, see below, *black-body and infrared emission of the Premio 10 moxa*) centred on the mid infrared (2 to μ 4m) stimulates the superficial and deep receptors without saturating the thermosensitive receptors by raising the cutaneous temperature above 47°C, physiologically limiting the pain.

If this threshold is exceeded, the pain information causes an immediate and reflexive withdrawal reaction, in addition to an unpleasant feeling for the patient. Furthermore, there is a significant risk of burning.

This may occur, for example, when a halogen lamp is used as a heat source, as the emission spectrum is centred on 1µm, which is far too much energy, and which very quickly leads to a burning sensation, but does not penetrate the sub-cutaneous tissue.

Heat is thus transmitted to the adjacent tissue by conduction, rather than through directly penetrating radiation, as occurs in the mid and far infrared.

It is important to mobilise the infrared receptors in deep tissue to elicit the physiological response to infrared stimulation.

Locally, heat can be used on trigger points or through slow scanning of a zone of pain, when the skin is not injured, and for which the pathology justifies this application of thermal stimulation.

The antalgic effect will be quick and observable, through the mobilisation of the fine nerve pathways (A delta fibres, C fibres) and by centrally blocking the pain (chronic affliction of the joint, for example).

In addition, heat stimulation has a marked effect on immunity, in particular by greatly stimulating the production, diffusion and activity of white blood cells, polynuclear neutrophils and mastocytes.

A large number of studies are being conducted on the indications and use of mid and far infrared in complementary medical practice.

There is, for example, the study of vaso-protective effects of the far infrared in the very specific case of arteriovenous fistula in persons with end-stage renal disease and on haemodialysis.

It is also used in other traditional medical practices.

Heat stimulation has a particular place in Traditional Chinese Medicine.

Moxibustion in Traditional Chinese Medicine

The term is inextricably linked to acupuncture in the Chinese ideogram. The recent discovery of ancient manuscripts in the (*Mawang-Dui*) tomb indicates that moxibustion antedates and is at the origin of the determination of the acupuncture meridians!

Heat stimulation using flameless mugwort combustion has been used for millennia, not only in China, but also in Japan.

Current scientific research highlights the many different physiological mechanisms involved. *For example, there is work demonstrating that the stimulation of specific points - 6Spleen / 67Bladder / 1kidneys in a bilateral approach- encourages the cephalic positioning of the foetus in the weeks prior to birth.*

The ancient texts recommend the very broad use of moxibustion, along with acupuncture; (*illnesses that are not cured using needles can be treated with moxas*). They describe the technique as simpler and less impressive than needles, but also taking longer to apply, even if the end results are often achieved more quickly and last longer.

It is also advised to use energy for all states of emptiness (of blood and energy), for people suffering from perverse energies, Wind, Cold and Damp, and also to reduce excesses, for Damp Heat, for example.

All deficiency syndromes are associated with a diminished defence system. It is also always useful to reinforce the immune system, for both prevention and treatment.

Imparting external energy is often more effective than mobilising the patient's own energy, especially if the patient's energy is limited or insufficient.

Specifically, moxibustion is a *yang* type and can tonify the *yin* and *yang*, *qi* as well as blood. It warms cold, heats and reinforces the *yang*, and can also tonify the *yin*, applied to the *yin* meridians, which also transport the *qi*.

It quickly mobilises the Blood and Energy, alleviating stasis.

Moxibustion is perfectly described in all works dealing with Traditional Chinese Medicine, and you have no doubt already used it.

Just remember that the two basic medical counter-indications in Traditional Chinese Medicine are excessive heat and the vacuity of the Yin with heat or fire.

Other counter-indications relate to and depend on the patient's and practitioner's states.

You can use the **Premio 10 moxa** in a natural manner, experiencing all the same sensations.

You don't need to light and put out moxas, and there are no toxic fumes and ashes!

For tonifying, gently warm the point, turning slowly around it, from the outside in, while moving closer to and farther from the skin. Keep the tip of the **Premio 10 moxa** about 2.5cm away for 10 seconds, pull it back for a brief moment, and repeat the process for 2 to 5 minutes without burning.

Treat the upper body first if the void is located in the lower body, and vice versa.

In general, the yang parts are treated before the yin, the back before the front, the upper before the lower, the limbs before the torso.

The dispersion method is the reverse: you create a warm point, turning from the inside out, for 5 minutes, then vigorously rub the zone to disperse the heat.

Premio 10 moxa black-body and infrared emission

The **Premio 10 moxa**'s emission curve is very near to that of a black body (see fig. 1).

A black body is an ideal object whose electromagnetic spectrum – meaning the distribution of the quantity of energy emitted according to the wavelength - is only a function of its temperature.

The curve has a specific, continuous shape, with a peak corresponding to the wavelength emitting the most energy, and a slope that is roughly straight for shorter and longer wavelengths.

The area beneath the curve represents the total energy imparted.

When a black body is heated to 850°C, as with the **Premio 10 moxa** emitter, the emission is centred on the mid infrared (peak at about 2.6µm), but with a significant amount of energy in the far infrared, up to wavelengths reaching 15µm.

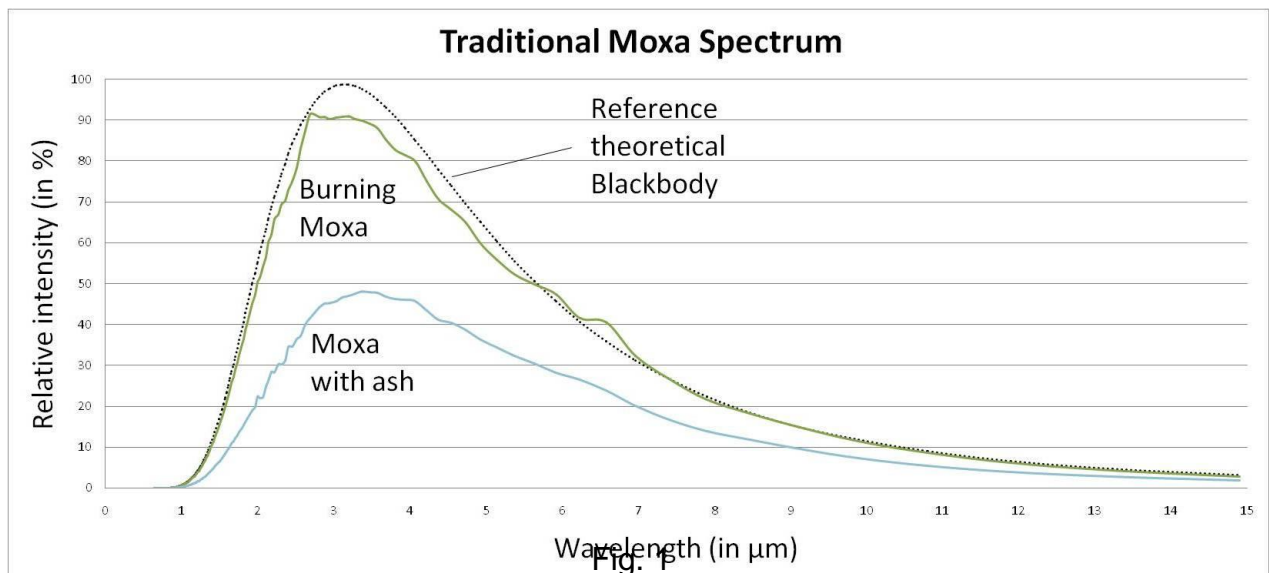


Fig. 1

During combustion, mugwort behaves like a black body.

The peak of the emission curve is centred on the 2.7-3 μ m wavelengths, depending on the quality of the raw material and the combustion, and is always located in the mid infrared.

The curve also shows the importance of the emission in the far infrared, which penetrate the tissue in depth.

The energy imparted by the far infrared is fundamental, serving to stimulate both the thermal and infrared receptors, thus providing complex multimodal information.

Moxibustion with the mugwort reacts locally, mobilising the vascular, tissue and nerve resources on site, and in general by informing and reacting with the central nervous system.

A comparison of the mugwort curve with the **Premio 10 moxa** emission curve reveals an almost identical spectrum, which justifies the term "moxa-like", and, above all, ensures identical results.

It also explains that your patient's sensations will be similar, so you can use the **Premio 10 moxa** in the same way as the mugwort roller you have grown accustomed to (fig.2).

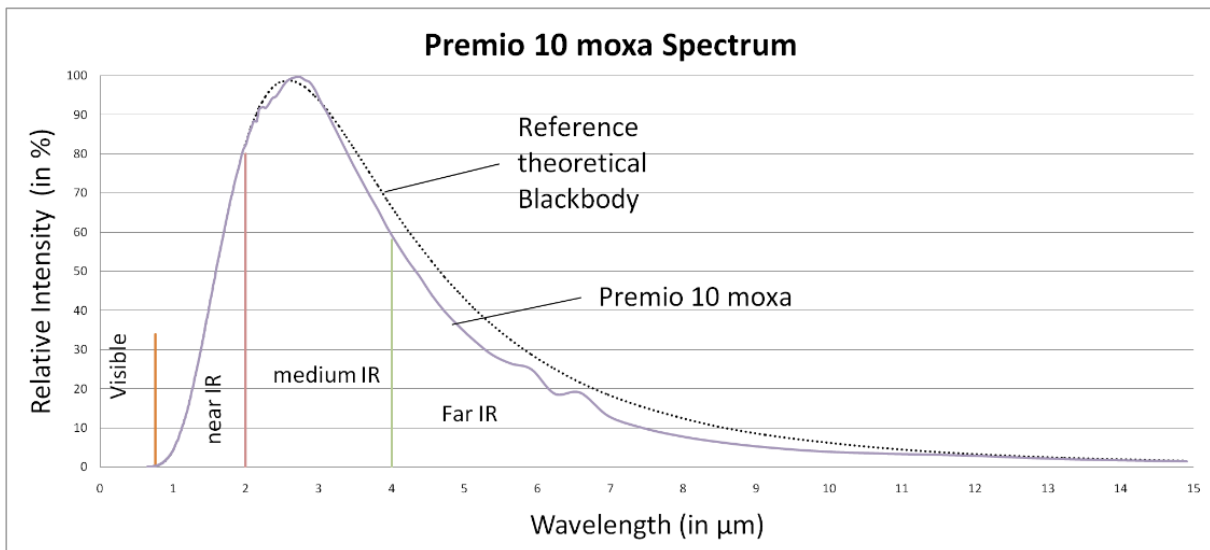


Fig. 2

The energy values have the same wavelength distribution, so they stimulate the different polymodal receptors involved in the same way: thermal receptors, receptors sensitive to the near and far infrared, far infrared energy receptors, etc.

Infrared radiation is what transports heat within tissue, due to its ability to penetrate the skin and adjacent structures (absorption window).

The human body itself behaves like a black body, emitting its heat with a

spectrum centred at 10 μ m, in the far infrared. It can therefore legitimately be supposed that there are receptors specific to this wavelength in the organism, and the radiation emitted by a moxa or the **Premio 10 moxa** resonates with them.

As you know, moxibustion is about more than just imparting a quantity of energy; it adds energy capable of reaching deep tissue and providing specific information to the physiological receptors.

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