

A New Anti-inflammatory Therapy For COPD

- A Brief Introduction to COPD
- Current Treatment of COPD
- Corticosteroid Resistant Chronic Inflammation
- Looking For New Anti-inflammatory Therapy
- Introduction to Moxibustion
- The Mechanisms of Moxibustion Based On The Theory of Traditional Chinese Medicine
- My Explanation of The Mechanisms of Moxibustion
- Inhalation Therapy of Moxa Smoke
- Assessment of The Risk of Inhalation of Moxa Smoke
- Treatment of COPD Patients With Inhalation of Moxa Smoke
- Evaluation of The Therapeutic Effects of Inhalation of Moxa Smoke
- The Side-effects of The Inhalation Therapy of Moxa Smoke
- Discussion of The Possible Anti-inflammatory Mechanisms of Moxa Tar
- Conclusion

A Brief Introduction To COPD

- COPD is an acronym for chronic obstructive pulmonary disease
- COPD is a chronic progressive inflammatory disease
- Causes: cigarette smoking, air pollutants, exposure to noxious agents, recurrent infection
- Inflammation: initially due to tissue reaction to various stimuli.
- Prolonged inflammation causes lung tissue damage and small air way obstruction, resulting in decreased lung function.

Current Treatment of COPD

- Inhaled and oral bronchodilators: SABA, LABA, LAMA and Theophylline. They only treat the symptoms of COPD.
- ICS: Only temporarily suppress the inflammation in COPD, cannot terminate the inflammation.

Corticosteroid Resistant Chronic Inflammation

- The inflammation in COPD is self-perpetuating. The underlying mechanisms are due to bidirectional reactions between T cells and macrophages and/or neutrophils.
- The inflammation in COPD is partially resistant to Corticosteroid, it can be suppressed but cannot be terminated by Corticosteroid.
- We must find new anti-inflammatory therapies or develop new anti-inflammatory drugs.

Looking For New Anti-inflammatory Therapy

- Looking for new anti-inflammatory therapy from Traditional Chinese Medicine

Introduction To Moxibustion

- Moxibustion is a therapy of Traditional Chinese medicine. It is to use burning moxa (*Artemisia Argyi*) to heat certain points (acupuncture points) on the patient's skin to treat diseases.

The Mechanisms of Moxibustion Based on The Theory of Traditional Chinses Medicine

- Moxibustin can give body extra energy, warm the blood and open the body's meridian lines.
- Western people do not think there is scientific evidence to support that moxibustion can effectively treat any disease.

My Explanation of The Mechanisms of Moxibustion

- The heat produced by burning moxa does not have any anti-inflammatory effect or other therapeutic effects.
- The smoke (or tar) produced by burning moxa has strong and special anti-inflammatory effect, that is the therapeutic mechanism of moxibustion.

Inhalation Therapy of Moxa Smoke

- Moxa smoke has anti-inflammatory effect
- Inhalation of moxa smoke can cure chronic laryngitis
- Potentially, inhalation of moxa smoke could treat chronic inflammatory lung diseases.

Assessment of The Risk of Inhalation of Moxa Smoke

- Inhalation of moxa smoke can slightly increase the risk of developing flu, but it can be prevented by isolating moxa smoke receivers from flu patients.
- Moxa smoke is no more harmful than tobacco smoke.
- The risk of inhalation of moxa smoke is low or minimal.

Treatment of COPD Patients With Inhalation of Moxa Smoke

- Treatment:
- 3-8 inhalations per session a day
- 15 days a course
- Total treatments: 2-4 courses(there is a 3-5 day break between courses)
- 25 patients females: 5 male: 20 age: 50-88

Treatment of COPD Patients With Inhalation of Moxa Smoke

- Alternative treat (for those who cannot cope with smoke inhalation)
- It is to apply the moxa smoke to the front and back chest except the precordial area by waving a burning moxa stick to them.
- 7-10 minutes on each side of the chest, one session a day.
- 15 days a course
- Total treatment: 2-4 courses (there is a 3-5 day break between courses)

Treatment of COPD Patients With Inhalation of Moxa Smoke

- Pre-condition for receiving treatment:
- 1. No evidence of active respiratory tract infection (no fever, no yellow or green colour sputum)
- 2. If patients do have active respiratory tract infection, they must be treated with antibiotics to clear the infection before starting the inhalation treatment.

Evaluation of The Therapeutic Effects of Inhalation of moxa Smoke

- Clinical therapeutic effects were evaluated only according to COPD symptoms.
- 3 of 25 patients had no improvement in their COPD symptoms after one course treatment. Failure rate: 12%
- 22 of 25 patients were COPD symptoms free for more than 6 months after 2 to 4 courses of treatment. At clinical level, they could be considered as cured. Cure rate: 88%

The Side-effects of the inhalation Therapy of Moxa Smoke

- Inhalation of moxa smoke can slightly increase the risk of chest infection for COPD patients. (1 of 25 patients who received the treatment developed mild chest infection.)
- Inhalation of moxa smoke can affect sleep.
- Moxa smoke is irritable for some people.

Discussion of The Possible Anti-inflammatory Mechanisms of Moxa Tar

- The anti-inflammatory mechanisms of moxa tar could be due to inhibition of T cell activity or its products.
- From observation evidence, moxa tar is only effective in treating chronic inflammatory conditions in which there are T cells infiltrates. For example, moxa tar is not effective for hay fever, there are no T cells involved in the pathogenesis of hay fever.

Conclusion

1. Inhalation of moxa smoke can cure the inflammation in COPD.
 - Moxa tar is a cure for chronic non-specific inflammation.
2. Moxa tar has strong and special anti-inflammatory property.
 - Its anti-inflammatory mechanisms are different from that of corticosteroid.
 - It can treat and cure a wide range of corticosteroid resistant chronic inflammatory conditions.
 - It has potential to treat atherosclerosis
3. Moxa tar is a very important source for developing novel anti-inflammatory drugs.