

# **Evidence summary**

# Chinese medicine for chronic cough

This summary of key findings from Volume 20: Chronic cough¹ of the Evidence-based Clinical Chinese Medicine monograph series outlines:

- what chronic cough is
- current treatments
- findings from research into classical Chinese medicine literature and modern Chinese medicine clinical studies.

## What is chronic cough?

Cough is an important reflex that helps to clear the throat and lungs. A cough that lasts more than eight weeks is called a 'chronic cough'. A chronic cough can have various causes,<sup>2</sup> depending on its type. The most common types of chronic cough include cough variant asthma (CVA), upper airway cough syndrome (UACS) and gastro-oesophageal reflux disease—related cough (GORD-C).<sup>3</sup>

### **Current treatments**

The main conventional medicine approach is to treat the underlying cause to suppress the cough. Medicines to reduce inflammation are used for CVA and UACS. Medicines to open the airways are also important for CVA, while antihistamines are also used for UACS.<sup>4,5</sup> GORD-C is treated with diet and lifestyle changes, and medicines to reduce acid reflux. Other treatments may be added if the cough does not respond.

Chinese medicine treatment options for chronic cough include oral and topical Chinese herbal medicine, acupuncture, moxibustion, and diet and lifestyle advice. Chinese medicine practitioners select the most appropriate treatment for each patient's symptoms according to clinical textbooks, guidelines, research and clinical experience.

# Classical Chinese medicine literature

The Encyclopedia of Traditional Chinese Medicine (Zhong Hua Yi Dian) is one of the largest collections of historical Chinese medicine books. These books include 436 citations describing Chinese medicine treatment of chronic cough, 355 of which related to Chinese herbal medicine.

None of the formulas recommended in contemporary textbooks were mentioned in the classical literature.

Twenty-nine citations described using acupuncture and moxibustion for chronic cough, and these therapies continue to be used in contemporary clinical practice.

# Modern Chinese medicine clinical studies

Nine biomedical databases (five Englishlanguage and four Chinese-language) were searched in May 2018 to write the *Chronic cough*<sup>1</sup> monograph. The search identified 217 relevant studies, including 198 randomised controlled trials, seven non-randomised controlled clinical trials, and 12 non-controlled studies.

#### Chinese herbal medicine

Chinese herbal medicine was tested in 166 randomised controlled trials for people with CVA, 11 trials for UACS and 16 trials for GORD-C.

In people with CVA, Chinese herbal medicine improved cough symptoms and overall symptoms more than placebo and conventional medicine. Chinese herbal medicine was also more effective than conventional medicines in improving some measures of lung function. Combining Chinese herbal medicines and conventional medicines also improved cough symptoms, overall symptoms and four measures of lung function more than

conventional medicines alone. Chinese herbal medicine did not reduce the number of white blood cells (which indicate infection).

In people with UACS, Chinese herbal medicine was more effective than both placebo and the combination of antihistamines and cough suppressants in improving cough symptoms. However, Chinese herbal medicine did not improve overall symptoms regardless of whether it was used alone or combined with conventional medicines.

In people with GORD-C, Chinese herbal medicine used alone or in combination with conventional medicines improved cough symptoms more effectively than conventional medicines alone. However, there were no differences between Chinese herbal medicine and conventional medicines in terms of reducing reflux symptoms.

Chinese herbal medicine seems to be safe, with fewer adverse events reported than in control groups.

#### **Acupuncture and related therapies**

Five of the included studies were randomised controlled trials of acupuncture therapies: three tested acupuncture, one tested ear acupressure and one combined acupuncture with Chinese herbal medicine. Combining acupuncture with conventional medicines was more effective at improving symptoms than conventional medicine alone, but combining ear acupuncture with conventional medicines did not improve symptoms more than conventional medicines alone.

Acupuncture also improved lung function when used alone or with herbal medicine. Ear acupressure had similar effects on lung function to conventional medicines, but reduced cough symptoms more than conventional medicines.

Only one study reported on safety. There were 18 adverse events with conventional medicine and two with acupuncture.

## **Key messages**

- Chinese herbal medicine, acupuncture and moxibustion have been used throughout history to treat chronic cough.
- Chinese herbal medicine reduced cough and overall symptoms when used alone or combined with conventional medicines.
- Acupuncture may improve overall symptoms, but more research is needed.
- Clinicians should discuss the potential risks and benefits of Chinese medicine treatments with patients, so patients can make informed choices about their health care.

### For more information

You can find out more about Chinese medicine for chronic cough in the book Evidence-based Clinical Chinese Medicine Volume 20: Chronic cough¹ from https://doi.org/10.1142/11906

To find out more about Chinese medicine research at the China–Australia International Centre for Chinese Medicine, visit <a href="www.rmit.edu.au/research/centres-collaborations/multi-partner-collaborations/cairccm">www.rmit.edu.au/research/centres-collaborations/multi-partner-collaborations/cairccm</a>

#### References

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#### Disclaimer

This evidence summary is not intended as a guide for self-medication or medical advice – patients should seek professional advice from qualified Chinese medicine practitioners.