

## **Evidence summary**

## Chinese medicine for adult asthma

This summary of key findings from Volume 4: Adult asthma<sup>1</sup> of the Evidence-based Clinical Chinese Medicine monograph series outlines:

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

#### What is adult asthma?

Adult asthma is a common chronic condition where the airways become inflamed and narrow, making breathing difficult. Its symptoms include wheeze, shortness of breath, chest tightness and cough.<sup>2</sup> Viruses, allergens, exercise and cold air can make symptoms worse (known as an 'acute exacerbation' or 'asthma attack').

### **Current treatments**

Medicines such as relievers and controllers are used to treat adult asthma symptoms. Relievers include bronchodilators, such as inhaled shortacting beta<sup>2</sup>-agonists (SABA) and longacting beta-2 agonists (LABA). Controllers are inhaled corticosteroids (ICS), including budesonide, fluticasone proprionate, fluticasone furorate and beclomethasone. LABA combined with ICS are often used together to better control asthma symptoms.

When people have persistent symptoms and/or exacerbations despite treatment with high-dose controller medicine, doctors will consider prescribing long-acting muscarinic antagonists (LAMA), leukotriene receptor antagonists (LTRA), low-dose azithromycin or biologic agents.

Chinese medicine treatment options for adult asthma include Chinese herbal medicine, acupuncture and physical exercise, including *Ba duan jin* and *tai chi*. Chinese medicine practitioners base their treatments on the patient's symptoms, relevant clinical textbooks and guidelines, research and clinical experience.

## Classical Chinese medicine literature

The Encyclopedia of Traditional Chinese Medicine (Zhong Hua Yi Dian) is a large and important collection of Chinese medicine books. It includes 869 citations that describe the treatment of asthma with Chinese herbal medicine.

The Encyclopedia of Traditional Chinese Medicine also includes acupuncture therapies as treatment options for asthma, but they are less frequently cited.

Chinese medicine therapies for adult asthma are similar in classical literature and modern clinical studies.

# Modern Chinese medicine clinical studies

#### Chinese herbal medicine

To write the *Adult asthma*<sup>1</sup> monograph, nine biomedical databases (five Englishlanguage and four Chinese-language) were searched in May 2014. This search found 333 relevant studies of Chinese herbal medicine for adult asthma. Most studies (246) were randomised controlled trials of Chinese herbal medicine. An additional search of the databases was conducted in August 2022, which identified five new relevant registered randomised controlled trials of Chinese herbal medicine.

Of the 246 randomised controlled trials of Chinese herbal medicine, 124 tested oral Chinese herbal medicine for chronic adult asthma and 122 tested oral Chinese herbal medicine for acute adult asthma.

In randomised controlled trials looking at chronic adult asthma, oral Chinese herbal medicine was more effective than pharmacotherapy (alone or with other treatments) in improving lung function and asthma control.

In randomised controlled trials looking at acute exacerbations of adult asthma, Chinese herbal medicine was given orally or through a nebulised inhaler and improved lung function.

Only a small number of mild adverse events occurred in people who participated in these trials. These adverse effects included headache and gastrointestinal upset.

The five new relevant registered randomised controlled trials of Chinese herbal medicine for adult asthma had mixed results: some showed benefit, some showed no benefit.

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

The original database search found 49 relevant studies of acupuncture therapies for adult asthma. Of these, 36 were randomised controlled trials. Results from 16 randomised controlled trials of acupuncture for adult asthma were published in a systematic review.<sup>4</sup> This review suggested acupuncture may play a role in improving quality of life, lung function and reduce asthma exacerbation in adults with asthma.

No new relevant registered randomised controlled trials of acupuncture for adult asthma were identified since 2014.

### Key messages

- Chinese medicine treatments have been used throughout history to treat adult asthma.
- Treatment approaches have remained consistent over time.
- Chinese herbal medicine may increase lung function and the chance of asthma control.
- Acupuncture may be an effective treatment option for adult asthma.
- Clinicians and patients should discuss the potential risks and benefits, so patients can make informed choices about their care.

#### For more information

You can find out more about Chinese medicine for adult asthma in the book Evidence-based Clinical Chinese Medicine Volume 4: Adult asthma<sup>1</sup> from https://doi.org/10.1142/9962

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

- 1. Shergis JL, Wu L. (2016) *Volume 4: Adult asthma*. Xue CC, Lu C, editors. World Scientific Publishing Co. Pte. Ltd.; Singapore. 2. Global Initiative for asthma. Global strategy for asthma management and prevention 2022. Available from: www.ginasthma.com.
- 3. Pang J, Shergis JL, Zheng L, *et al.* Clinical evidence for acupuncture for adult asthma: Systematic review and meta-analysis of randomised sham/placebo-controlled trials. *Complement Ther Med.* 2023;75:102956.

#### 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.