

## Evidence summary

### Chinese medicine for rhinosinusitis

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This summary of key findings from *Volume 25: Rhinosinusitis*<sup>1</sup> of the Evidence-based Clinical Chinese Medicine monograph series outlines:

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

#### What is rhinosinusitis?

Rhinosinusitis is an inflammation of the nasal sinuses and cavity that leads to a blocked nose, congestion or discharge.<sup>2</sup> People with rhinosinusitis may also have infections, feel pain or pressure in the area, or lose their sense of smell.<sup>2</sup> Rhinosinusitis lasting more than 12 weeks is considered chronic. Some people with chronic rhinosinusitis may have nasal polyps (extra tissue growing from the nasal lining).<sup>2</sup>

#### Current treatments

Treatments for rhinosinusitis include steroid nasal sprays, saline irrigation and oral antibiotics.<sup>3</sup> Biologic therapies (medicines that target specific parts of the immune system) may be used for severe symptoms or when other treatments don't work.<sup>3</sup> Surgery may also be considered when other treatments don't adequately relieve symptoms.<sup>2</sup>

Chinese medicine treatment options for rhinosinusitis include oral and topical (nasal drops, steam inhalation, nasal irrigation) Chinese herbal medicine, acupuncture, moxibustion, massage and ear acupuncture. 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 678 references to treatments for nasal symptoms that may relate to rhinosinusitis. Most (436) related to oral Chinese herbal formulas.

The most frequent Chinese herbal medicine formulas were *Cang er san* (47 references) and *Fang feng san* (25 references). Eight formulas identified in the search are recommended in contemporary clinical guidelines or textbooks, which suggests some continuity in treatment.

Acupuncture and moxibustion were mentioned in 49 references. Both treatments continue to be recommended in clinical textbooks and guidelines.

#### Modern Chinese medicine clinical studies

To write the *Rhinosinusitis*<sup>1</sup> monograph, five English-language and four Chinese-language biomedical databases were searched in April 2018. The search found 131 relevant clinical studies of Chinese medicine for rhinosinusitis, including 104 randomised controlled trials, 19 non-randomised controlled clinical trials, and eight non-controlled studies. A search of the International Clinical Trials Registry Platform in June 2023 identified two newly published randomised controlled trials.

#### Chinese herbal medicine

Of 92 randomised controlled trials, four showed mixed results for the effects of oral Chinese herbal medicine for acute rhinosinusitis. One study showed improvement in quality of life and appearance of rhinosinusitis, while the others showed no difference between

groups in the severity of nasal symptoms measured on a 10-point scale.

For chronic rhinosinusitis, one study suggested that oral Chinese herbal medicine may improve nasal symptom severity and quality of life compared with placebo. Other studies found similar effects to conventional medicine in improving nasal symptom severity and quality of life.

Combining oral Chinese herbal medicine with conventional medicine was more effective than conventional medicine alone in improving the severity of nasal symptoms measured on a 10-point scale, and quality of life in people with chronic rhinosinusitis who had not had surgery. The combination also improved the appearance of rhinosinusitis assessed using endoscopy and computed tomography (CT).

Four studies tested nasal Chinese herbal medicine for chronic rhinosinusitis. Nasal Chinese herbal medicine improved nasal congestion more than placebo. Combining nasal Chinese herbal medicine with conventional medicines improved quality of life and appearance on endoscopy, but not nasal symptom severity.

In the 57 randomised controlled trials of recovery following nasal surgery, adding oral and/or nasal Chinese herbal medicines to conventional treatments improved quality of life and severity of some symptoms.

No serious adverse events were reported, but too few studies reported on safety to make any conclusions about the safety of Chinese herbal medicines for rhinosinusitis.

### Acupuncture therapies

Five randomised controlled trials tested acupuncture therapies. Acupuncture was no better than sham acupuncture or conventional medicines at reducing nasal swelling or symptoms in people who had not undergone surgery.

In people who had undergone surgery, acupuncture reduced pain more than analgesics when pain was measured using present pain intensity and the McGill Pain

Questionnaire, but not when pain was measured on a 10-point scale. Ear acupressure reduced pain during recovery from surgery more than usual care alone.

Minor adverse events were reported with acupuncture therapies, but there were not enough data for an overall assessment of its safety.

### Key messages

- Chinese herbal medicine and acupuncture have been used for nasal symptoms for centuries.
- Chinese herbal medicine used alone, with conventional medicines, or post-surgery may improve some outcomes.
- Acupuncture may improve symptoms, but more research is needed.
- Chinese medicine practitioners should discuss potential risks and benefits of treatment with patients and carers.

### For more information

You can find out more about Chinese medicine for rhinosinusitis in the book *Evidence-based Clinical Chinese Medicine Volume 25: Rhinosinusitis*<sup>1</sup> from <https://doi.org/10.1142/12683>

To find out more about Chinese medicine research at the China–Australia International Centre for Chinese Medicine, visit [www.rmit.edu.au/research/centres-collaborations/multi-partner-collaborations/cairccm](http://www.rmit.edu.au/research/centres-collaborations/multi-partner-collaborations/cairccm)

### References

1. May B, et al. (2022) *Volume 25: Rhinosinusitis*. Xue CC, Lu C, editors. World Scientific Publishing Co. Pte. Ltd.; Singapore.
2. Fokkens WJ, et al. (2020) European position paper on rhinosinusitis and nasal polyps 2020. *Rhinol* 58(Suppl S29):1–464.
3. Maza-Solano J, et al. (2023) Chronic rhinosinusitis with nasal polyps management in the biologic therapy era: an international YO-IFOS survey. *Eur Arch Otorhinolaryngol*. 280(5):2309–16.

### 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.