

Evidence summary

Chinese medicine for rheumatoid arthritis

This summary of key findings from **Volume 26: Rheumatoid arthritis¹** of the Evidence-based Clinical Chinese Medicine monograph series outlines:

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

What is rheumatoid arthritis?

Rheumatoid arthritis is a chronic inflammatory autoimmune disease that affects joints, especially the hands, wrists and feet.² Key symptoms include pain, stiffness and swelling. Other symptoms include fatigue, weight loss, and low-grade fever.³ In the later stages of the disease, joints can become deformed.

Current treatments

Conventional medicine treatments include non-steroidal anti-inflammatory drugs (like aspirin and ibuprofen), steroids and disease-modifying anti-rheumatic drugs (DMARDs) that suppress the overactive immune system.⁴

Chinese medicine treatments for rheumatoid arthritis include oral and topical Chinese herbal medicine, acupuncture, moxibustion, Chinese massage (*tuina*), exercise therapy, psychological care and diet and lifestyle modifications. 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 618 references

to treatments for rheumatoid arthritis-like symptoms. Most treatments (574) related to oral and topical Chinese herbal medicine. The most frequent Chinese herbal medicine formulas were *Wu tou tang* (33 references) and *Gan cao fu zi tang* (28 references). *Wu tou tang* is still recommended in contemporary clinical guidelines and textbooks.

Acupuncture and moxibustion were found in 31 references. Both treatments are also still recommended in clinical textbooks and guidelines.

Modern Chinese medicine clinical studies

To write the *Rheumatoid arthritis¹* monograph, five English-language and four Chinese-language biomedical databases were searched in September 2018. The search found 248 relevant clinical studies of Chinese medicine for rheumatoid arthritis-like symptoms, including 183 randomised controlled trials, 18 non-randomised controlled clinical trials and 47 non-controlled studies.

Chinese herbal medicine

One hundred and thirty-nine randomised controlled trials examined Chinese herbal medicine. On the American College of Rheumatology (ACR) scale for global improvement, oral Chinese herbal medicine was more effective than placebo for achieving 50% improvement of symptoms, but no different to placebo for achieving 70% improvement. Chinese herbal medicine was also more effective than placebo in reducing morning stiffness time, the number of swollen joints and pain scores. It was comparable to placebo for grip strength and tender joint count.

In blinded randomised controlled trials, oral Chinese medicine and conventional medicine achieved similar outcomes for

20%, 50% or 70% improvement of swollen joint count, tender joint count and morning stiffness time. Oral Chinese medicine was more effective than conventional medicines in improving pain scores.

Oral Chinese herbal medicine combined with conventional medicines increased achievement of 20%, 50% or 70% improvement of symptoms. The combination also reduced disease activity, morning stiffness time, swollen joint count, tender joint count and pain more than conventional medicines alone.

Topical Chinese herbal medicine reduced pain scores more than placebo, and when combined with conventional medicines, it further reduced morning stiffness time.

Safety was reported inconsistently. Similar numbers of adverse events were reported in people who received oral Chinese herbal medicine and those who received placebo or non-steroidal anti-inflammatory drugs. Fewer adverse events were observed in people who received oral Chinese herbal medicine compared to DMARDs or the combination of non-steroidal anti-inflammatory drugs and DMARDs.

Acupuncture therapies

Thirty-one randomised controlled trials tested acupuncture therapies. The effects of acupuncture or electroacupuncture were similar to sham for all outcomes.

In a blinded randomised controlled trial, acupuncture combined with conventional medicines was as effective as sham acupuncture plus conventional medicines in achievement of 20% improvement of symptoms, and in reducing swollen joint count, tender joint count and pain. In another trial, combining acupuncture with conventional medicines more effectively reduced disease activity, swollen joint count, tender joint count and pain than conventional medicines alone.

Combining moxibustion with conventional medicines more effectively reduced disease activity and pain than conventional medicines alone.

Adverse events were incompletely reported for acupuncture therapies.

Key messages

- Chinese herbal medicine and acupuncture therapies have been used for rheumatoid arthritis for centuries.
- Oral Chinese herbal medicine combined with conventional medicines improved global scores, morning stiffness time, and joint tenderness and pain, and reduced pain score.
- Acupuncture and moxibustion may improve rheumatoid arthritis symptoms.
- Chinese medicine practitioners should discuss potential risks and benefits of treatment with patients and caregivers.

For more information

Find out more about Chinese medicine for rheumatoid arthritis in the book *Evidence-based Clinical Chinese Medicine Volume 26: Rheumatoid arthritis*¹ from <https://doi.org/10.1142/12966>

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

References

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3. Hameed K, Akil N. (2010) Rheumatoid arthritis: Clinical features and diagnosis. In: *ABC of rheumatology*, 4th ed. Adebajo A, editor. Wiley-Blackwell, Chichester, pp. 71–75.
4. Smolen JS, et al. (2020) EULAR recommendations for the management of rheumatoid arthritis with synthetic and biological disease-modifying antirheumatic drugs: 2019 update. *Ann Rheum Dis* 79(6): 685–699.

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.