

## **Evidence summary**

## Chinese medicine for chronic heart failure

This summary of key findings from Volume 15: Chronic heart failure<sup>1</sup> of the Evidence-based Clinical Chinese Medicine monograph series outlines:

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

### What is chronic heart failure?

Chronic heart failure is a complex condition that occurs when your heart muscle doesn't pump blood to the rest of your body the way it should. Its symptoms include breathlessness, fatigue and swollen ankles or legs (oedema). People often also have coughing, wheezing, tummy bloat/swelling, and a fast heartbeat.<sup>2</sup>

Chronic heart failure affects 1–2% of adults and more than 10% of those aged 70 years and older. Coronary artery disease, diabetes and high blood pressure are the most common causes of heart failure.<sup>3</sup>

#### **Current treatments**

Chronic heart failure treatments aim to improve the patient's heart function and quality of life, reduce symptoms, and prevent hospital admission and death.

Pharmacotherapy, such as angiotensinconverting enzyme inhibitors, angiotensin receptor-neprilysin inhibitors, betablockers and mineralocorticoid receptor antagonists, are commonly used to manage chronic heart failure. Nonpharmacotherapy treatments, including implantable cardioverter-defibrillators and cardiac resynchronisation therapy, may be used in some patients.<sup>3</sup>

Lifestyle management, such as monitoring weight, quitting smoking, being physically active, rest and managing stress, are also

recommended for people with chronic heart failure.

Chinese medicine treatment for chronic heart failure mainly involves Chinese herbal medicine. 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 classical Chinese medicine books. It includes 338 citations that describe the treatment of symptoms associated with chronic heart failure with oral Chinese herbal medicine. Other Chinese medicine therapies were rarely cited for this condition.

Chinese herbal medicine therapies for chronic heart failure in classical literature differ from those in modern clinical studies.

# Modern Chinese medicine clinical studies

To write the *Chronic heart failure*<sup>1</sup> monograph, nine biomedical databases (five English language and four Chinese language) were searched in February 2017. This search found 177 clinical studies of Chinese medicine therapies for chronic heart failure, including 165 randomised controlled trials, seven nonrandomised controlled clinical trials and five non-controlled studies. An additional search of the International Clinical Trials Registry Platform in April 2023 identified 10 new registered randomised controlled trials of Chinese medicine therapies.

#### Chinese herbal medicine

The combination of oral Chinese herbal medicine and routine care/

pharmacotherapy was evaluated in 152 randomised controlled trials. This combination was more effective than routine care/pharmacotherapy alone. Only mild adverse events were associated with oral Chinese herbal medicine.

Results from eight new registered randomised controlled trials confirmed the effectiveness of Chinese herbal medicine for chronic heart failure, used alone or in combination with routine care/pharmacotherapy.

#### Other Chinese medicine therapies

The benefits of *tai chi* and *Baduanjin* for chronic heart failure management were also evaluated in four randomised controlled trials. These studies showed *tai chi* and *Baduanjin* may be beneficial for people with chronic heart failure for improving heart function and overall quality of life.

The updated search found one randomised controlled trial of *tai chi* and one of *Baduanjin* for managing chronic heart failure. Both studies also supported the benefits of these exercises for people with chronic heart failure.

#### For more information

Find out more about Chinese medicine for chronic heart failure in the book *Evidence-based Clinical Chinese Medicine Volume* 15: Chronic heart failure<sup>1</sup> from https://doi.org/10.1142/11762

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>

### Key messages

- Chinese medicine treatments have been used throughout history to treat chronic heart failure-related symptoms.
- Oral Chinese herbal medicine is the main Chinese medicine therapy for chronic heart failure.
- Oral Chinese herbal medicine used alone or in combination with routine pharmacotherapy is an effective treatment for chronic heart failure, with mild adverse events.
- Tai chi and Baduanjin may be beneficial for chronic heart failure.
- Clinicians and patients should discuss potential risks and benefits, so patients can make informed choices about care.

#### References

- 1. Zhang CS, M.L., Evidence-based clinical Chinese medicine volume 15: chronic heart failure. 2020, Singapore: World Scientific Publishing Co. Pte. Ltd.
- 2. Heidenreich, P.A., et al., 2022 AHA/ACC/HFSA Guideline for the Management of Heart Failure: Executive Summary: A Report of the American College of Cardiology/ American Heart Association Joint Committee on Clinical Practice Guidelines. J Am Coll Cardiol, 2022. 79(17): p. 1757-1780.
- 3. McDonagh, T.A., et al., 2021 ESC Guidelines for the diagnosis and treatment of acute and chronic heart failure. Eur Heart J, 2021. 42(36): p. 3599-3726.

#### 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 practitioner.