

# A new look at pancreatitis

West China Hospital researchers pursue high-quality evidence to support the use of traditional Chinese medicine alongside existing therapies for pancreatitis.

There are no drugs specifically designed to treat acute pancreatitis, a disease that affects around 2.8 million people worldwide each year. The condition can lead to debilitating symptoms, including severe abdominal pain, organ failure, and complications which may require intensive care and surgical intervention.

Since the 1970s, doctors at West China Hospital have been treating the potentially life-threatening disease with traditional Chinese medicine, supported by modern therapies. The team treats roughly 2,500 acute pancreatitis patients per year, and using a multidisciplinary approach, the physicians have limited the

mortality rate among severe cases to around 19%<sup>1</sup>.

Qing Xia, director of the Department of Integrated Traditional Chinese and Western Medicine, has explored the use of Chaiqin chengqi decoction (CQCQD), a Chinese medicinal formula, both as an oral drug and a purgative to treat acute pancreatitis. The team has published a series of studies investigating the active ingredients, and anti-inflammatory properties of CQCQD and its derivatives<sup>2</sup>.

Meanwhile, Chengwei Tang, a professor at the Department of Gastroenterology, has recently conducted a randomized controlled clinical trial of cyclooxygenase-2 inhibitors against severe acute pancreatitis<sup>3</sup>.

The team also applies the common Chinese medicinal formula Lihuedan to patients' abdomen and rib areas. Along with acupuncture, acupoint injection, and measures to guide the

replenishment of body fluid loss, Xia's team has managed to lower the need for surgery among severe patients.

In a 2020 study<sup>1</sup>, Xia and colleagues found that contrary to previous understanding that there were two mortality peaks in acute pancreatitis patients, those at West China Hospital showed only a single peak within the first two weeks. Xia says his team is now investigating if early use of Chinese medicines could have helped to erase the second peak.

The hospital has recently established a new multidisciplinary centre with more than 71 beds for acute pancreatitis patients, bringing together Xia's team and experts in pancreatic surgery and gastroenterology. "A key focus is to generate high-quality evidence for Chinese medicine and other novel pancreatitis treatments," Xia says.

Last May, Xia's team launched a double-blind, randomized, and placebo-controlled clinical trial comparing the addition of CQCQD to standard of care alone in severe acute pancreatitis patients. It aims to enrol nearly 400 participants and will evaluate organ failure rate and

duration as well as mortality rate as key endpoints.

The team also looks to understand the mechanisms of the disease and the treatment effect of Chinese medicine through the lens of modern science such as multi-omics profiling. "We have systematically collected patients' peripheral blood, hoping to provide insights into potential predictive biomarkers or drug targets," says Wei Huang, a professor at the centre.

In 2021, Xia has published the Integrated Traditional Chinese and Western Medicine Practice Guidelines for Diagnosis and Treatment of Acute Pancreatitis. "Going forward, we want to figure out the mechanism of CQCQD, and how factors like obesity and hypertriglyceridaemia — a condition in which triglyceride levels are elevated — are associated with the occurrence of the disease in China," says Xia. ■

## References

1. Shi N, Liu T, de la Iglesia-Garcia D, et al. *Gut* 2020;**69**:604-605.
2. Wen Y, Han C, Liu T, et al. *Phytomedicine* 2020;**79**:153328.
3. Huang Z, Ma X, Jia X, et al. *Am J Gastroenterol* 2020;**115**:473-480.



Qing Xia's team is investigating the use of traditional Chinese herbs in parallel with modern pancreatitis therapies.