













MO Medical Observer Opinion

There is a new way to fix the 'forgotten valve' of the heart



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As an interventional cardiologist, I would like to use Heart Valve Disease Awareness Week as an opportunity to shine a light on the tricuspid valve, which is often referred to as the "forgotten valve" in published literature.

Tricuspid valve regurgitation is a condition commonly seen by cardiologists and GPs in Australia, especially in elderly people.

It occurs when the valve between the two right heart chambers does not close properly, resulting in blood leaking backwards into the upper-right chamber of the heart.

If left untreated, this condition can ultimately cause heart



Recent data shows that there could be more than 120,000 people living with different stages of tricuspid valve regurgitation in Australia.

In my practice alone, I would easily see 10 people a week who have significant tricuspid valve regurgitation.

These patients often have another heart condition or have undergone heart surgery that affected the valve leaflet, such as having a pacemaker implanted.

Despite its prevalence, the signs and symptoms of tricuspid valve regurgitation, such as shortness of breath, lack of energy, and ankle swelling, are not yet common knowledge among the Australian public.

They are often simply brushed off as part of the ageing process.

This explains why many people meet an interventional cardiologist only when their regurgitation is too advanced for medical management or when they are experiencing heart failure.

Due to the advanced age of most of these patients, they are not suitable for the highly invasive nature of open-heart surgery, which until recently was the only other option to "fix" these patients' tricuspid valves.

However, since August 2021, some Australian interventional cardiologists have had the opportunity to offer a minimally invasive procedure with new medical technology to repair the tricuspid valve without the need for invasive open-heart surgery.

Tricuspid transcatheter edge-to-edge repair (TEER) is performed under a light general anaesthetic using a catheter and tricuspid clip (TriClip).

The catheter is passed through a small incision in the femoral vein and is guided into the heart using transoesophageal echocardiography to clip two of the tricuspid valve leaflets together, preventing/stopping blood from leaking back into the right chamber.

Importantly, the recovery process is significantly decreased, meaning patients can usually go home 24 or 48 hours after the procedure and start doing again those things they stopped being able to do before.

Data from the TRILUMINATE study published in 2021 found that using TriClips in patients with moderate or greater tricuspid valve requrgitation is safe and effective.

Before the TriClip device was approved for use in Australia, most of my patients would be put under medical management for their tricuspid valve regurgitation, a process that simply alleviates the symptoms but does not repair the regurgitating heart valve.

While this minimally invasive treatment option is available at hospitals in large cities such as Sydney, Melbourne and Brisbane, I remain aware that many rural and remote patients face a continued access challenge when it comes to cardiology services.

The *Heart of Australia* mobile heart clinic is an organisation working to bridge this gap of access to specialist care in remote parts of Queensland.

Their fleet of trucks travels to remote areas of the state with cardiologists and GPs on board, and patients can book appointments for important tests such as echocardiograms, stress tests and ultrasounds.

If a patient is diagnosed with a serious heart condition that requires further investigation, the visiting cardiologist will refer them to the closest interventional cardiologist, who can treat them.

Since the organisation was launched in 2014, it has delivered care to 15,000 patients and saved 600 lives.

It is still early days for the tricuspid TEER procedure in Australia. We will see it steadily grow over the next couple of years as more hospitals are able to offer this treatment option to patients.

It is important to ensure that our peers in general practice and cardiologists away from metropolitan areas are aware that there is a minimally invasive solution for patients with this common heart condition.

People with severe tricuspid valve regurgitation should be offered all possible treatment options to ensure they have the best opportunity to live a long and high-quality life.

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