Heart 'first' puts Monique in synch

EXCLUSIVE

ALANAH FROST

REVOLUTIONARY pacemakers that have no wires have been successfully implanted into the heart of a patient in Melbourne in a world-first procedure.

The exciting milestone — the work of cardiologists at Monash Health — used two already available wireless devices to rejig the heart's rhythm, without the need for leads to be connected into the heart.

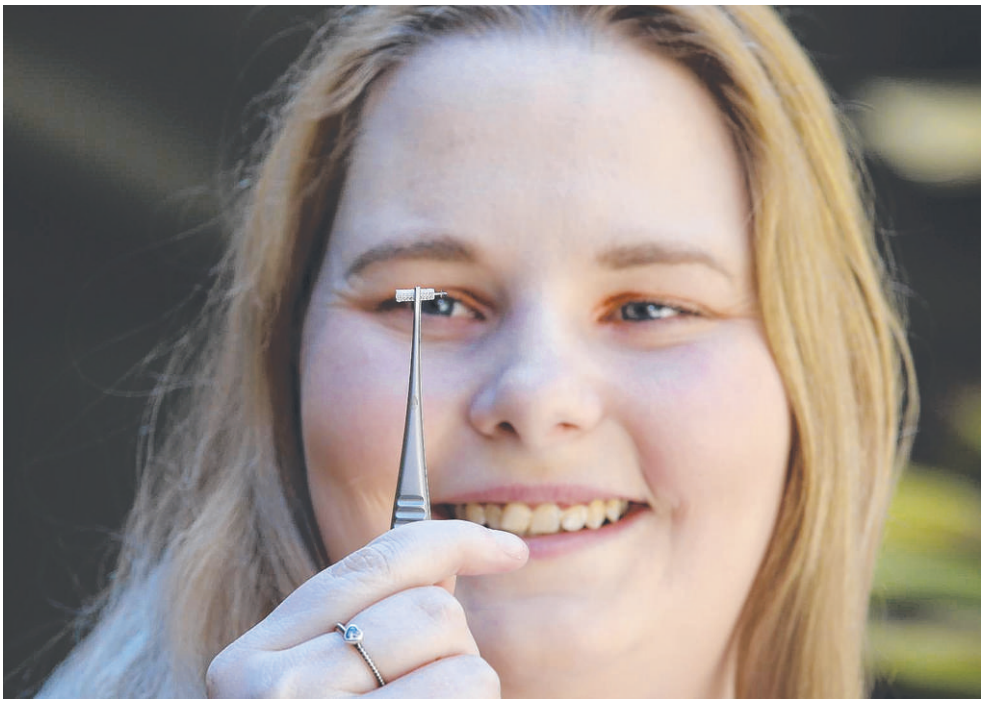
It's the first time the pacemakers have been used in tandem to create the response and as a first, not final, option.

Jeffrey Alison, who heads the Cardiac Rhythm Management research team at Monash Heart, hopes the pioneering procedure will become a "good alternative" for helping patients with extreme types of heart failure.

"This is sort of a bit of a leap into the future to where pacing may go," Dr Alison said. "It's a proof of concept that we can achieve very complex interventions without having to put any leads inside the heart."

Current standard practice for patients who need a pacemaker is an implant connected via three permanent leads, or wires, that pass through a patient's veins and into the heart.

In some cases where this has failed, or where there's a risk of infection, a pacemaker without leads is later used.



Monique Neu, 24, with her world-first wireless pacemaker. Picture: DAVID CAIRD

Last month, via keyhole surgery, Dr Alison and his team successfully trialled the use of two leadless devices.

Their patient, Monique Neu, 24, was the first person in the world to have the double procedure, which placed one device in her right ventricle and another, about the size of a grain of rice, in the left.

This tracks the activity of the atrium, where the heart's normal rhythm originates, and then the devices can be used to restore Ms Neu's heart beat to normal — which is done via a technique known as cardiac resynchronisation therapy.

Ms Neu, of Frankston, said she was "so grateful" to have had the procedure after she had serious heart conditions, including cardiomyopathy and heart failure, diagnosed when she was 13.

"I have a lot more energy, I don't run out of breath as much as I used to and I just feel more alive," she said.

"I feel very lucky to have had this procedure done, because it literally saved my life."

Dr Alison said while the procedure was specific to people with a certain type of heart rhythm abnormality, it had the potential to help others — particularly young people — who needed long-term pacing.

"It's two devices that have been developed for separate indications and we've brought them together for this specific occasion," Dr Alison said.

"It's not for everyone with heart failure, but (for some) we can have a huge impact on patient outcomes. It's really pleasing."

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