

Vic hospital trials new cancer treatment

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By Katie Bradford

A revolutionary painless technique that uses electrical pulses to zap tumours is being trialled at Melbourne's The Alfred hospital to treat cancer.

Radiologists say Irreversible Electroporation (IRE) has the potential to provide an alternative to surgery or radiotherapy.

The technique involves using a device called an IRE-Nanoknife to accurately place fine needle electrodes in or around the tumour, which is then targeted with short intense electric pulses.

Ken Thomson, The Alfred's Professor of Radiology, said the technique is "remarkable" and could very possibly replace chemotherapy in the future.

"We're on the way to proving the safety of it," Dr Thomson said.

"But we haven't really got a technique that we can say guarantees this would be as good as surgery. We're some months or years away from that point."

He is confident about its potential, but refused to go as far as to call it a cure for cancer.

"I'm trying to stay calm, I'm extremely excited about it because I think it has enormous potential, but I don't want to raise false hopes among the public that I've suddenly got a cure that no one else has."

The treatment creates microscopic holes in the wall of the tumour cells, causing the cells to die before they are removed by the body.

Seventeen prostate cancer patients have been treated in America using the technique, which gave Dr Thomson the confidence it would work in Australia.

So far he has treated a liver cancer patient and one with kidney cancer.

What surprised Dr Thomson was how painless the procedure was, with patients reporting no negative effects after undergoing the treatment.

There are many more positives.

"It's very quick, it doesn't appear to cause any damage to the surrounding tissue, the tissue appears to grow back normally without blocking arteries and veins and (IRE) appears to have a wide ability to treat a solid tumour, and no pain afterwards, there's very little bad about it," he said.



Health experts are trialling a new technique that could provide an alternative to surgery.

IRE also is very low risk, with needles placed on the tumour in 40-second bursts.

"I think personally it's a breakthrough because of the lack of surrounding damage."

The nerves, blood vessels and tissues have all come out unscathed in patients treated during trials.

Tumours start shrinking almost straight away and are half the size in just two weeks.

Eighteen patients are taking part in the trial, while Dr Thomson has funding to treat up to 100 patients.

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