

Innovation creates world-first in operating room

A world-first operation using advanced software and clever robotics has demonstrated the benefits of a new approach to spinal surgery.

Last month, at The Valley Private Hospital in Melbourne, Dr David Edis used a breakthrough development in the Mazor Renaissance Robotic Guidance system to undertake an entire spinal operation with the patient lying on their side, reducing the time needed for the procedure.

"This addition to the Mazor Renaissance system, the PROlat mounting option, means we don't have to turn the patient face down halfway through the operation," Dr Edis says.

"Not doing 'the flip' saves about 60 minutes, which means less time under anaesthetic for the patient."

Many degenerative problems of the spine occur when the cushioning discs between the vertebrae become damaged or diseased.

This may reduce space between the vertebrae and compress nerves that branch off from the spinal cord, causing chronic back pain.

The surgeon decompresses the spine by removing the discs, inserting implants known as 'cages' to restore the space between the vertebrae, then uses screws to hold the alignment in place.

Traditionally, the whole operation has been carried out using 'open surgery' with the patient lying face down.

Surgeons have improved the procedure by removing the discs and placing cages through the abdomen, with the patient lying on their side. This reduces the risk of damage to muscles and nerves.

A patient is then typically moved into a



Dr David Edis performs spinal surgery using the Mazor Renaissance PROlat approach.

prone position so that surgeons can insert the screws. However, the Mazor Renaissance PROlat allows surgeons to place the screws while the patient is still on their side.

Dr Edis' operation was the first in Australia to use the Mazor Renaissance PROlat approach, and the first in the world to combine this technique with a 3D scanner.

Images taken during the procedure are integrated into the Renaissance software, allowing the surgeon to identify challenges

in the patient's anatomy and plan the screws accordingly.

System tools then guide the surgeon to place the screws accurately and in a minimally invasive fashion.

"The big concern up to now has been accuracy," Dr Edis says. "Putting in instrumentation when someone is on their side was not familiar to us. But the Mazor Renaissance guidance system tells us where things are without having to open up the skin. This is a natural progression in the use

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- Dr David Edis

of the available technologies and made sense for this particular patient."

The Mazor Renaissance system is distributed in Australia by LifeHealthcare, an independent Australian medical device distributor.

Ariel Weinrebe, robotics business manager at LifeHealthcare, says: "We are pleased to pioneer the access to spinal robotics in Australia and now extend the Mazor Renaissance Robotic Guidance system capabilities with the PROlat approach, promoting patient safety and surgical efficiency."

Kieron Martin, chief executive officer of The Valley Private Hospital, says: "We are proud of the hospital's history of innovation in surgical treatment and delighted to have delivered yet another surgical first."

"We continue to pursue state-of-the-art technology so that our highly regarded surgeons are supported to deliver clinical best practice outcomes for patients."

Any surgical or invasive procedure carries risk. Before proceeding, you should seek a second opinion from an appropriately qualified health practitioner.

 A large graphic advertisement for the Mazor Renaissance PROlat Solution. It features a close-up of a surgeon's hands in purple gloves using a robotic surgical instrument. The instrument has a green glowing component. The background is a blurred operating room. The text 'Renaissance' is prominently displayed in white, with 'EMPOWERED BY MAZOR CORE' underneath. Below that, the slogan 'Skip the Flip' is written in a large, bold, white font, followed by 'Mazor Renaissance® PROlat™ Solution'. At the bottom, a short paragraph describes the solution as a single-position method for placing spinal implants in the lateral decubitus position to shorten OR time. The Mazor Robotics logo is in the bottom right corner.

Renaissance
EMPOWERED BY MAZOR CORE

Skip the Flip
Mazor Renaissance® PROlat™ Solution

A single-position solution for placing spinal implants in the lateral decubitus position which can shorten OR time and streamline the procedure.

Mazor Robotics