

SA first: Robotic assisted surgery breaks new ground

A highly specialised urogynaecological procedure has been performed for the first time in South African private healthcare by means of robotic assisted surgery. This ushers in a new era for the treatment of urogynaecological and colorectal conditions in the country.



Source: Supplied.

Professor Stephen Jeffrey, a urogynaecologist practising at Netcare Christiaan Barnard Memorial Hospital, says that the versatile da Vinci robotic system, which was installed at the hospital in 2014, has been highly successful in treating numerous urological conditions.

It was also recently used in the first robotic assisted cardiothoracic surgery in Southern Africa.

Now, the technology is once again at the forefront of medical advancements, with Professor Jeffrey having recently conducted the first robotic assisted sacrocolpopexy in a private healthcare facility.

According to Jeffrey, sacrocolpopexy is done to correct pelvic organ prolapse, a fairly common condition affecting approximately 10% to 15% of women. Pelvic organ prolapse occurs with the weakening of certain muscles supporting the vagina, uterus, cervix, bladder, urethra, intestines and rectum.

“Pelvic organ prolapse can affect one or more of these organs, resulting in general feelings of discomfort as well as bladder

and bowel dysfunction. This can seriously impact the quality of life of those affected, with consequences to their physical and sexual health.

“Pelvic prolapse tends to be more common in women because of the strong link with childbirth though it can occur in men and is associated with ageing and extreme weight-bearing activities over an extended period of time. Constipation and being overweight are risk factors for pelvic prolapse.

Why the da Vinci?

“The da Vinci robotic system takes surgery into an enlarged 3D context, providing an immersive surgical experience. When you conduct the surgery from the console you become one with your surgical instrument in a virtual sense.

“This is the greatest paradigm shift for me as a surgeon who has for many years been doing laparoscopic, or keyhole surgery. The robotics and visuals of this particular system are truly transformational in optimising accuracy,” notes Jeffrey.



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“While there are a number of options for the correction of pelvic prolapse and colorectal conditions, including open surgery and keyhole surgery, the da Vinci offers benefits that are quite unmatched in any other type of modality and is by far the least invasive way to address these issues.

“With the ability to operate through an even smaller and more precise incision in the abdomen than can be done in keyhole surgery, we are able to achieve better nerve preservation, fewer sutures, reduced post-operative pain, less time in hospital and expedited healing. With other forms of surgery a patient would require a lengthy recovery period of up to six weeks but with the da Vinci they can resume normal activities again within two to three weeks,” says Jeffrey.

The first patient's experience

Razia Paleker, the first patient to undergo robotic assisted sacrocolpopexy at the hospital, says that as a busy mother of four who also helps to run the family business full time, it was without question the right decision for her.

“I had normal births with all four of my children and also spend a great deal of time on my feet due to the nature of my work. Last year I started having breakthrough bleeding and seemed to have one urinary tract infection after the next.

“I went to see my doctor who determined that I had developed polyps and that my bladder had dropped. This was causing considerable physical discomfort and also impacted my spiritual life, as I am Muslim and we cannot pray when menstruating.



Source: Supplied.

“After exploring a number of different avenues to address these issues, I consulted Professor Jeffrey who informed me about the benefits of robotic assisted surgery. I was a little anxious about having the procedure, but for me it was a question of quality of life.

“Professor Jeffrey is such an excellent doctor, I knew that I could not be in better hands. He ordered a colonoscopy the day before the operation to check if there might be anything else that could be addressed at the same time to save me from the possibility of having to undergo two operations – that is just the kind of doctor he is, really putting you as a patient first,” notes Paleker.

“A few weeks have passed and I am feeling amazing. The healing has been so quick, I have had no complications and I am able to get around easily. In addition to the wonderful care that I received from Professor Jeffrey, his team and the nurses at Netcare Christiaan Barnard Memorial Hospital, I have been fortunate to have incredible support from my family and friends.

“To others out there who are dealing with pelvic organ prolapse – just get it seen to. In this day and age of modern medicine, there really is no need to suffer in silence,” she says.

A focus on quality of life

Dr Imraan Mia, a colorectal surgeon who works with Professor Jeffrey at Netcare Christiaan Barnard Memorial Hospital, says that improved quality of life is one of the greatest differentiators of the da Vinci system, which will now also be used in the treatment of cancers of the colon and rectum as well as more benign conditions such as inflammatory bowel disease, among others.

“When navigating the pelvic and colorectal area during surgery, you are working within a very narrow space that contains a lot of important nerves responsible for bladder, rectal and sexual function. With this system you are able to see those nerves more clearly and make smaller incisions, which means better nerve preservation and a dramatic improvement in retaining sensation and control in that area.

“With robotic assisted surgery we are not limited to one fixed point and can operate on two different areas during the same surgery if there is a need to address more than one issue. This can further reduce recovery time, minimising the impact on the patient’s life,” says Mia.

From greater awareness to wider use

According to Dr Tim Forgan, a colorectal surgeon, president of the South African Colorectal Society, and part of the team at Netcare Christiaan Barnard Memorial Hospital, an increasing number of people stand to benefit from the level of intervention made possible by robotic assisted surgery.

“When it comes to colorectal cancers we are unfortunately seeing a rapid increase in incidence, with colon cancer now being the third most common cancer in South Africa. Predictions are that current numbers will increase two to threefold over the next 20 years. This is largely attributable to lifestyle related issues such as diets that are high in animal protein and fat and low in fibre,” says Forgan.



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“In much the same way that people tend to avoid the subject of pelvic prolapse, there is not enough conversation around colon and rectal issues, which really is a tragedy when preventative measures can be taken and when world-class technologies, such as the da Vinci robotic system, are available in our country. Creating greater awareness is hugely important in tackling these issues as a society.”

Jeffrey explains that it is standard practise in the USA and Europe to use robotic-assisted surgery for the treatment of these types of conditions, and that it is encouraging to see more and more patients in South Africa benefitting from this modality.

General manager designate at Netcare Christiaan Barnard Memorial Hospital, Shadeeran Govender, says that the facility welcomes the new applications of the da Vinci robot, which has proven to be such a valuable specialised tool in providing world-class care to patients in South Africa.

“It is remarkable to see the ongoing progress that is being made in South African healthcare thanks to highly advanced technologies and the professional expertise and commitment to improved patient outcomes demonstrated by specialists.

“We are honoured to serve our community alongside such exceptional healthcare professionals and look forward to seeing the positive impact that robotic-assisted surgery will have in the lives of more patients,” he concluded.