

# I was operated on by a robot

Bladder cancer is the fourth most common cancer in men and until recently, removing tumours involved major surgery.

**HILARY FREEMAN** explains how new, high-tech keyhole surgery could improve the lives of thousands of patients

**E**NGINEER Jayantha Patimayake has spent his career developing the latest technology, but he never expected to become one of the first patients to undergo a pioneering surgical procedure performed by a robot.

A month ago, Jayantha, 59, had a robotic radical cystectomy – which involved the removal of his bladder and prostate – to cure his bladder cancer.

He is one of 30 patients in the UK to have this procedure which involves the surgeon driving a

robot from a remote console and watching the operation through a large microscope that offers a 3D close-up of the nerves, blood vessels and muscles. The robot's movements within the patient's body mimic those of the doctor's hand on the console.

Jayantha was diagnosed with bladder cancer in 1991 after a routine medical at work.

"I didn't have any symptoms but they found traces of blood in my urine," he recalls. "I had a cystoscopy (in which a scope is passed into the bladder via the penis), which was very unpleasant and showed a growth in my bladder. It was a huge shock. I was only 42 and had no pain or problems urinating."

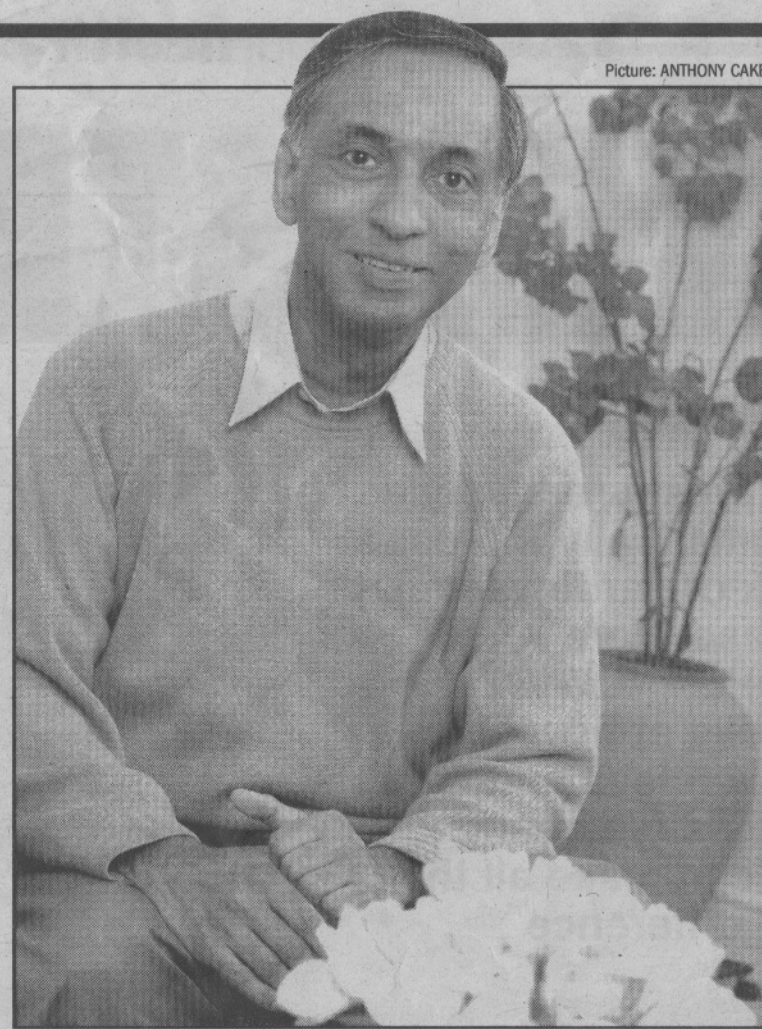
More than 10,000 people are diagnosed with bladder cancer each year, the vast majority male. Risk factors include smoking and exposure to chemicals at work and the most common symptoms are blood in the urine, urinary frequency and pain.

For non-smoker Jayantha, who lives in Barnet, north London, with his wife Mangalika, 59, and son Marlon, 21, there was no discernible cause. "Fortunately they told me it had been found early and was treatable," he says. "I had another cystoscopy – this time under general anaesthetic – and the cancerous cells were burned away."

Over the next few years, Jayantha had six-monthly check-ups. Although his cancer was localised and did not spread, it kept coming back. Each time new cancer cells were detected they were cauterised. By the mid Nineties, Jayantha had begun to be treated with radiotherapy, then chemotherapy.

"In 2005, I started to suffer from continence problems because of the scarring on my bladder," he says. "I couldn't sleep because I had to get up seven or eight times in the night to urinate. I couldn't travel without risking an accident and traffic jams were a nightmare. I was becoming depressed and it was very hard for my wife too."

Then in August 2007, a routine blood test showed that Jayantha's kidneys weren't working properly as a result of his bladder problems. His consultant said it was time to consider bladder removal, the last resort surgery for bladder



RECOVERING: Jayantha saw the surgery as 'almost like a computer game'

cancer and a procedure required by about a third of patients.

"The benefits were that my cancer would be cured and my incontinence would be solved, plus my kidneys would be saved," he says. "The downside was that I'd have to wear a urostomy bag for life."

Jayantha sought a second opinion from Mr Shamim Khan, consultant urological surgeon at The London Clinic, who agreed he needed the operation. But Mr Khan told him about a new robotic procedure that he and colleague Mr Prokar Dasgupta had pioneered in the UK.

"As an engineer I'm very comfortable with technology," says Jayantha. "I found it intriguing the surgeon wouldn't be touching my body at all – it would almost be like being a human computer game."

**T**HE robotic cystectomy employs the da Vinci Surgical S System, state-of-the-art technology which consists of an ergonomically designed surgeon's console and a patient-side cart with four robotic arms. In theory, the surgeon and patient don't need to be in the same room – the doctor is at a console viewing a 3D image of the area to be operated on. The robot translates the surgeon's hand, wrist and finger movements into precise, real-time movements of surgical instruments inside the patient.

"A cystectomy is one of the most major operations in urology, involving removal of the bladder and prostate in males and the bladder with uterus and

ovaries in females," says Mr Khan. "Open surgery takes five or six hours, entails long incisions – from the belly button to the pubis – and often excessive blood loss. Up to 50 per cent of patients in test centres need blood transfusions. There's also a slow recovery and a poor cosmetic result."

"Using a robot allows the surgeon to do a more precise job with minimal blood loss and using very small incisions, which allows quicker recovery from surgery and a much better cosmetic result."

"There's less pain, a smaller risk of infection and it spares the nerves behind the prostate which control erections, so sexually active men are more likely to remain potent. On average the length of a patient's hospital stay is halved."

"We have now performed more than 30 operations – there have been 150 worldwide – with excellent results."

Robotic cystectomies are only being performed privately at The London Clinic in London's Harley Street or on the NHS at Guy's Hospital in the capital. But Mr Khan believes they will become the standard of care in the UK.

Jayantha's operation took place a month ago and he is recovering well. "I'm so relieved that my cancer is finally gone," he says. "I sleep through the night now, have had virtually no pain and I only had to stay in hospital for a week. I'm getting used to living with a bag and a stoma – it's a small price to pay."

● For more information on The London Clinic, contact [www.thelondonclinic.co.uk/](http://www.thelondonclinic.co.uk/) 020 7535 5516.