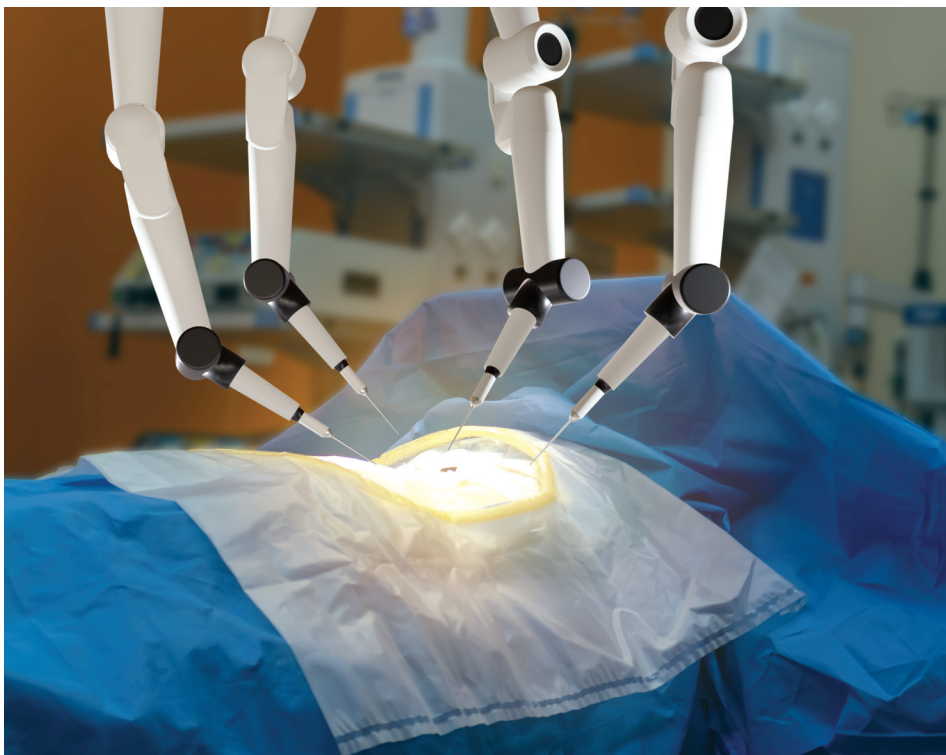


# BENEFITS OF ROBOTIC SURGERY FOR **BLADDER CANCER**



“

Robotic surgery is an advanced surgical procedure performed using robotic systems. This advanced technique aids the surgeon in accessing the areas that were otherwise limited in other minimally invasive procedures like laparoscopy.

**I**t is common for many of us to experience a little bit of pain, burning sensation or discomfort during urination. It is often blamed on dehydration or Urinary Tract Infection. But, if you are above 50 and are frequently suffering from these persistent, nagging symptoms, along with traces of blood in the urine, it's time to see your doctor immediately.

The symptoms of bladder cancer often mimic UTI (urinary tract infection), and many patients tend to resort to home remedies or even self-medication, delaying the diagnosis. If detected at an early stage, bladder cancer can be cured. Advanced robotic surgery is now turning out to be a boon for patients.

Tobacco use (smoking / chewing) and exposure to chemicals is implicated in cause of bladder cancer. The typical symptoms include blood in the urine or painless haematuria, frequent and painful urination, and discomfort. Bladder cancer is detected by imaging tests, including CT-Scan, MRI, PET Scan etc and cystoscopic biopsy.

The urologist would decide upon the surgical intervention depending on the stage and location of the cancer. Most

common bladder cancer surgeries include Transurethral Resection of Bladder Tumour, Cystectomy, Neobladder Reconstruction, Ileal Conduit, and Continent Urinary Reservoir. With medical advancements leaping ahead, the latest technique is Robotic Surgery:

## **Robotic Surgery for treating Bladder Cancer**

Robotic bladder surgery and bladder reconstruction surgery have come a long way in the last few decades. Robotic surgery is an advanced surgical procedure performed using robotic systems. This advanced technique aids the surgeon in accessing the areas that were otherwise limited in other minimally invasive procedures like laparoscopy. Until recently, cystectomy was performed through an invasive approach by making a large incision in the abdominal region. Though laparoscopy is minimally invasive, it has limitation of rigid instruments, making suturing in surgery more difficult.

Robotic surgery uses specialized instruments with 360 degree range motion and 7 degree of freedom making the surgery more precise and easy to perform.

During this highly-advanced surgical procedure robotic radical cystectomy the expert uro onco-surgeon makes a few small incisions in the abdomen through small surgical instruments and a tiny camera. Guided by robotic arms, the bladder is disconnected and removed by the surgeon. the surgeon may remove nearby organs like prostate, seminal vesicles, vas deferens in men and reproductive organs in women.

The true benefit of robotics in bladder cancer surgery is in form of a new bladder from the patient intestine by the robot- called neobladder. This complex surgery, though technically demanding, avoid large incision and reduce complication rates.

After bladder removal, urinary reconstruction can also be performed by creating an ileal conduit. It uses a portion of the small intestine called the ileum, creating a pathway connecting the ureters to a surgically constructed opening in the abdominal region, known as a stoma.

### Advantages of Robotic Bladder Surgery

This super-advanced, minimally invasive surgery is a boon to bladder cancer patients. The advantages are aplenty.

#### Precise Access

Under the 3D-high-definition view, the surgeon would be able to perform highly delicate incisions, dissections and suturing.

#### Less Pain

The patient experiences significantly less pain than in open surgery and recovers faster.

#### Minimal Blood Loss

This minimally invasive surgical procedure assures very little blood loss.

#### Shortened Hospital Stay

With faster recovery, the patient gets discharged from the hospital within a few days of the surgery.

Robotic surgery for bladder cancer is gaining wider acceptance for being a safe, promising invasive procedure that ensures faster recovery of the patient and better outcomes, and improved quality of life.



**Dr Hemang Bakshi**

Uro Oncologist & Robotic Surgeon,  
HCG Cancer Centre Ahmedabad

## Animal virus detected in patient who died after **PIG HEART TRANSPLANT**



**A**fter a 57-year-old man died weeks after receiving a heart transplant from a pig, researchers have discovered the organ harboured an animal virus. Researchers trying to learn what killed the first person to receive a heart transplant from a pig have discovered the organ harboured an animal virus but cannot yet say if it played any role in the man's death.

A Maryland man, 57-year-old David Bennett Sr., died in March, two months after the groundbreaking experimental transplant. University of Maryland doctors said. They found an unwelcome surprise — viral DNA inside the pig heart. They did not find signs that this bug, called porcine cytomegalovirus, was causing an active infection.

But a major worry about animal-to-human transplants is the risk that it could introduce new kinds of infections to people.

Because some viruses are “latent,” meaning they lurk without causing disease, “it could be a hitchhiker,” Dr Bartley Griffith, the surgeon who performed Bennett's transplant, told The Associated Press. For decades, doctors have tried using animal organs to save human lives without success. Bennett, who was dying and ineligible for a human heart transplant, underwent the last-ditch operation using a heart from a pig genetically modified to lower the risk that his immune system would rapidly reject such a foreign organ. The Maryland team said the donor pig was healthy, had passed testing required by the Food and Drug Administration to check for infections, and was raised in a facility designed to prevent animals from spreading infections. Revivacor, the company that provided the animal, declined to comment.

- NSH