

Robotic Surgery

The number of operations on urinary tracts, carried out with the help of laparoscopes, has been increasing over the past 10 years and has become something of a trend.

Minimally invasive surgery has advantages over open surgery. For example, the incisions needed to be made into the abdomen are much smaller, the patient suffers less pain and post-operation recovery is faster.

Laparoscopic surgery involves the use of a video camera and several thin instruments inserted into the abdomen through the small incisions. The camera acts as the surgeon's eyes, looking inside the patient's body as he performs the operation. But this technique may not be suitable for complex surgery.

Nowadays, complex operations are being carried out increasingly with the help of robots. The robotic system is known as the "da Vinci" surgical system which uses a console consisting of a set of controls that manoeuvre four robotic arms. The system also comprises two cameras that provide 3D (three dimension) images. A surgeon is in attendance at the patient's bedside to fit different instruments to the robotic arms to perform different aspects of the operation.

The robotic system offers all the benefits of laparoscopic surgery plus greater precision and effectiveness. Most of its applications are suited for prostatectomy, the surgical removal of all, or part, of a cancerous prostate gland. Robotic surgery enables cancer tissues to be removed without damaging the normal tissues and nerves. The operation can also reduce the risk of urinary incontinence (uncontrolled discharge of urine) and erection dysfunction.

The robotic system can be used in other urological, gynecological and cardiac surgeries as well.