

ROBOTIC SURGERY

Robotic surgery means 'keyhole' or 'minimal access' surgery using the help of a Surgical Robot. The Robot has tiny arms, the ends of which are about 8 mm or the size of a pen. These operating ends can be inserted into the body cavity like abdomen or chest of a baby through tiny key-holes and then the surgeon, sitting on a console, commands the Robotic arms to perform surgery inside the cavity.

At Nanavati hospital, we are fortunate to be one of the very few centres in the country to provide Robotic surgery for Children.

How is it different to Laparoscopic surgery?

While the basis of key-hole surgery remains the same, Robotic surgery has many advantages over Laparoscopic surgery. There is 3 dimensional vision and high power magnification to enable the surgeon to see better. The tiny ends of the arms have an ability to bend in many directions like the human wrist providing greater accuracy in dissection and suturing of tissues.

Is there any proof that Robotic surgery is superior?

Yes and no. Yes there is lot of proof that Robotic surgery is superior to Laparoscopic surgery in complex operations. It is not superior in simple operations like Appendicectomy, Cholecystectomy etc. that are done easily by Laparoscopic surgery.

No it is not superior to open surgery in outcomes such as immediate complications. But it decreases the overall trauma to the body, its muscles and gives a faster recovery. It also minimises late complications such as adhesions and strictures.

How expensive is Robotic surgery?

Robotic surgery costs about Rupees 1-2 lakhs over and above open surgery. Although expensive up front, the benefits of superior outcomes, lesser tissue trauma and long term complications would probably negate the cost in the long run.

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What surgeries are recommended to be done by Robotic surgery?

Complex operations on the kidneys, intestines, bladder, lungs, liver etc are preferred to be done by Robotic surgery. Common examples are –

- Robotic Pyeloplasty
- Robotic Ureteric Reimplantation
- Robotic Choledochal cyst excision
- Robotic Fundoplication
- Robotic Gastric pull-up
- Robotic Liver resection
- Robotic Mitrofanoff procedure
- Robotic Bladder augmentation
- Robotic Tumour resection – Wilms, Neuroblastoma etc
- Robotic Detrusorotomy
- Robotic intestinal resection and anastomosis