



MINIMALLY INVASIVE PAEDIATRIC SURGERY WITH FOCUS ON LAPAROSCOPY



What is Minimally Invasive Paediatric Surgery?

Minimally Invasive Paediatric Surgery (MIPS) has revolutionised the way surgical conditions in children are treated. It offers a safer and more efficient alternative to traditional open procedures. Among these techniques, laparoscopy is a benchmark, providing excellent outcomes with reduced physical and emotional stress for young patients.

An overview of Laparoscopy

In Laparoscopy, surgery is performed through small incisions using a camera (laparoscope) and specialised instruments. Instead of large cuts, surgeons make tiny openings, often just a few millimetres wide, through which they insert a camera that projects magnified images onto a screen. This enables precise visualisation and manipulation of internal organs without the need for extensive tissue disruption.

Advantages of laparoscopic surgery

One of the most significant advantages of laparoscopic surgery in children is reduced postoperative pain. Smaller incisions mean less trauma to the body,

leading to quicker recovery and minimal need for pain medication. Children can resume normal activities much sooner compared to traditional surgery.

Another benefit is better cosmetic outcomes. The tiny incisions used in laparoscopy leave minimal scarring. This reduces long-term visible reminders of surgical intervention.

Laparoscopy is now widely used to treat a variety of paediatric conditions, including appendicitis, hernias, undescended testes and gallbladder diseases. It is also increasingly applied in more complex procedures, such as neonatal surgeries and urological or gastrointestinal corrections. Even delicate procedures in infants can be performed safely using minimally invasive techniques.

A significant advantage is that safety and precision are enhanced due to the magnified view provided by the laparoscope, allowing surgeons to identify structures clearly and reduce the risk of complications. Additionally, smaller wounds lower the chances of infection and postoperative complications.

A specialised field

It is to be noted though that successful laparoscopic surgery in children requires specialised training and expertise. Paediatric patients are not just “small adults”. Their anatomy and physiology present unique challenges. Surgeons must be skilled in handling delicate tissues and using appropriately sized instruments.

Laparoscopic surgery is a major advancement in paediatric surgical care which combines precision, safety and faster recovery. It has become a preferred approach for many conditions as technology continues to evolve.