

## **Pediatric Surgery Department, KMC, Manipal**

### **1. Why to choose M.Ch. Pediatric Surgery at KMC Manipal?**

The department was established in 1982 after separating from the department of General Surgery and has completed over 35 years of its existence. The department is actively involved in teaching, providing clinical diagnostic services and in carrying out comprehensive treatment of all operative and non-operative pediatric surgical problems. This department treats common problems such as hernias, hydroceles, pyloric stenosis, intussusceptions, urological cases including PUJO, hypospadias including Disorders of Sexual Differentiation, pediatric laparoscopy, cystoscopy and trauma. Uncommon problems including congenital anomalies and tumors of the head and neck, chest, abdomen and pelvis are also addressed. State-of-the-art facilities like operating suites including minimal access surgery is available to gain expertise in the field of pediatric surgery. The surgeons and the nurses in department are specially trained in the surgical care of infants and children. The department functions in conjunction with the Departments of Pediatrics, Neonatology and genetics to provide comprehensive care to the surgical neonate, infant and child including prenatal counselling. The department is involved in teaching undergraduate medical students and postgraduates from the general surgery department. The advantages include hands on surgical training with guidance from experienced faculties, exposure to complete range of pediatric surgical conditions and excellent institute library with latest journals. The post graduate teaching activities include, lectures, seminars, journal clubs, case discussions and ward rounds. The department is also a part of Global collaborative study on Anorectal malformations and other funded projects.

## **2. Core competencies pursued during postgraduate training at Manipal**

- Neonatal Surgery Knowledge: Understand the unique anatomic, pathophysiologic, and genetic conditions that affect the fetus and neonate and classify congenital malformations. Understand the anatomic and physiologic principles which guide successful operative repair of neonatal diseases.
- Learn the principles of stabilization, appropriate preoperative diagnosis, and preparation of the sick child.
- Understand pathophysiology of surgical conditions in children including esophageal atresia, anorectal malformations and urological cases including pelvi-ureteric junction obstructions
- Understand the principles of early and late follow-up for complex surgical problems of childhood
- Assist or perform under supervision: peripheral venous and arterial cut down access, placement of umbilical catheters, placement of central venous access, tube thoracostomy, herniotomy, conditions including airway obstruction, necrotizing enterocolitis, congenital anomalies of the abdominal wall, GI tract, chest and diaphragm and solid tumors
- Stabilize and assess pediatric trauma patient airway management in older children
- Interpret specialized radiologic studies including upper GI series, barium enema, CT scan, MRI, radionuclide scans
- Participate in preoperative, operative, and postoperative care of more complex problems in pediatric surgery such as: branchial cleft and thyroglossal duct cysts, cystic hygroma; laryngoscopy, bronchoscopy, esophagoscopy; thoracotomy for biopsy, lung resection; laparotomy

for diaphragm repair and intestinal obstructions.

- Develop a working relationship with members of the pediatric intensive care unit in managing postoperative pediatric patients.
- Conducting tumor board discussion with multidisciplinary teams.

### **3. Career opportunities after Post graduation**

- Many alumni of the Department are presently holding key faculty positions (Director of the children hospital, Heads of the Departments in India and Consultant Pediatric surgeons) in various pediatric surgical centers in India and abroad and making us proud.

The pediatric surgical patient requires tender care with delicate skills and diligent follow up as the newborn, baby or toddler grows through adolescence into a mature adult. As pediatric surgeons we learn from the little kids daily and are grateful to them for giving us the opportunity to serve them.

- Academic position in pediatric surgery department around the country
- Consultant in corporate hospitals as a Pediatric surgeon, pediatric urologist, pediatric minimal access surgeon or surgical oncologist
- Pediatric Colorectal surgeon
- Fetal surgeon
- Consultant –in a program of pediatric transplant center
- Pediatric surgeon overseas

Also visit:

<https://manipal.edu/kmc-manipal/department-faculty/department-list/paediatric-surgery.html>