

DEPARTMENT OF PAEDIATRIC & NEONATAL SURGERY

- Abode of Quality Care!

AHALIA WOMEN & CHILDREN'S HOSPITAL is always committed and relentless in offering the best service to its patients with the latest technology and highly skilled professional team. In our endeavour in providing high quality and complete care to our suffering children, we have started the surgical super speciality department - **Paediatric and Neonatal Surgery** - takes care of the surgical needs of the new-born babies to the adolescent children. The Neonates and Children need expert care because "**Children are not miniature adults!**"

The department is headed by **Dr.V.Muthulingam.M.S.,M.Ch, Senior consultant Paediatric and Neonatal surgeon** with vast experience in Neonatal surgery, Paediatric urology and Minimally Invasive Surgery(MIS).

Apart from tender tissues, size, unique surgical conditions and anomalies; they are physiologically very different in terms of energy requirements, metabolism, thermoregulation, incompletely developed organs and fragile immune system makes them special patients who demand skilful management from the care giver.

At **Ahalia Woman & Children's Hospital**, We Provide;

- Neonatal and Paediatric Surgical Emergency Service
- Out-Patient Service
- Antenatal Counselling Service
- Day Care Surgery
- Paediatric Laparoscopic Surgery
- Video Assisted Thoracoscopic Surgery [VATS]
- Endourology
- Hypospadiology
- General Paediatric Surgery
- Surgery for Congenital Anomalies
- GI and Hepatobiliary Surgery
- Urological Surgery

COMMON DAY CARE PROCEDURES

- Circumcision
- Herniotomy
- Tongue tie release
- Node biopsy
- Simple cyst excision
- Sclerotherapy, etc

COMMON EMERGENCIES

- Acute appendicitis
- Intussusception
- Mid gut volvulus
- Obstructed hernia
- Intestinal obstruction
- Acute scrotum
- Torsion ovary
- Peritonitis
- Diaphragmatic hernia with respiratory failure
- IHPS with dehydration
- Oesophageal atresia with tracheo-oesophageal fistula
- Intestinal atresia
- Anorectal anomaly
- Hirschsprung's disease

COMMON GENERAL PAEDIATRIC SURGICAL CONDITIONS

- Branchial fistula / sinus
- Preauricular sinus
- Ranula / mucous cyst
- Thyroglossal cyst / fistula
- Lymph cyst
- Haemangioma / lymphangioma
- Torticollis

COMMON UROLOGICAL CONDITIONS

- Hydronephrosis
- Duplex system and ureteral anomalies
- Vesicoureteric reflux
- Megaureter
- Ureterocoele
- Urethral valves
- Hypospadias
- Undescended testis / Ectopic testis
- Disorders of Sex Differentiation (DSD)

VIDEO ASSISTED THORACOSCOPIC SURGERY (VATS)

- Lung biopsy
- Mediastinal node biopsy
- Decortication
- Congenital diaphragmatic hernia / Eventration repair
- Lobectomy
- Thymectomy
- OA with TEF repair

LAPAROSCOPIC PROCEDURES

- Appendectomy
- Cholecystectomy
- Evaluation of undescended testis
- Diagnostic laparoscopy for Non-Specific Abdominal Pain (NSAP)
- Laparoscopy for ovarian torsion
- Omental and mesenteric cyst excision
- LADD'S procedure for malrotation
- LAARP for anorectal anomaly
- Pyeloplasty

- Nephrectomy
- Pyelolithotomy
- Fundoplication
- Splenectomy
- Ovarian cystectomy

ENDOUROLOGICAL PROCEDURES

- Evaluation of UTI
- Evaluation of dysfunctional elimination syndrome [DES]
- Diagnostic cystourethroscopy
- STING procedure for VUR
- URS for stones
- Cystoscopic valve fulguration
- Cystoscopic ureterocoele deroofing
- Genitoscopy
- Ureteric stenting

FAQ's

1. Why should I approach a paediatric and neonatal Surgeon for my child's surgical problems?

As already said Children are not miniature adults! Their problems, physiological functions, diseases and anomalies are different from adults. The treating surgeon must be well versed about the spectrum of developmental anomalies and it's on-table management, utilising the available tissues, considering the dynamic variations related to future growth, functional aspects and demands of the developing systems and psycho social implications. So **Paediatric and Neonatal surgeon is "the surgeon of choice"** for your child.

2. Is it safe, will they withstand and tolerate the surgery?

Absolutely it is safe! Due to scientific research and development in the field of anaesthesia, better medicines, advancements in neonatal and paediatric surgical techniques and multidisciplinary approach made the surgery in neonates and children safe ever before.

3. Does the surgery cause pain for the child?

No surgery is completely pain free postoperatively! In fact, children tolerate pain better than adults!! But postoperative pain management protocols, advanced drug delivery systems, newer medicines, Minimal Access Surgery (MAS- laparoscopy, Thoracoscopy, Endoscopy procedures... etc) keeps them pain free post operatively!

4. What is the ideal age for surgery?

Though certain conditions have ideal age criteria for surgery as [given here](#); but largely, age alone does not decide the timing of the surgery, but it is the condition that dictates!!

Certain anomalies need to be corrected even before birth that is when the baby (foetus) is still in the womb, this surgery is called as **FOETAL SURGERY!!**

Some conditions need surgery in the middle of the delivery!! This surgical procedure is named as **EXIT** (EX utero Intrapartum Treatment) procedure.

Certain birth defects need emergency surgery, immediately after birth to save the newborn and it is called as **NEONATAL SURGERY**.

Other surgical conditions operated on based on the problem and time of presentation.

5. Is anaesthesia safe for the child?

The last decade, anaesthesiology has become very safe due to various methods and technical advancements. Launch of safe and effective anaesthetic agents, sophisticated delivery systems, complete and continuous monitoring systems of all parameters along with strict but baby friendly preoperative preparation of the child made anaesthesia safe even in physiologically compromised newborns also!!

6. Is it risky and complicated to operate on the newborn and children?

Not always! Though most of the surgical newborn is around 1.5 to 3 kg or even lesser with proportionately tiny and tender organs. It is almost the difference between crossing a river on a single log wooden bridge and a six-lane highway comparing with an adult! Many problems are congenital defects with deficient tissues and nerves sometimes organ itself is absent with consequent functional and physiological disadvantages.

But the surgeon operating on them is specially trained to meet these challenges and come out with the best possible outcome both anatomically and functionally! Apart from trained surgeon, especially designed instruments for the child surgery, magnifying loops, illuminating systems, various monitoring and safety devices, neonatal ventilators, paediatric anaesthetic equipments, paediatric anaesthetists, neonatal and paediatric intensivists and intensive care systems helps a lot in successful outcome.

7. Is the medicines and surgery produce complications in children?

Nothing in the world is 100% safe and predictable! Different patient's responses to the same drug are variable because every patient's metabolism, behaviour, intellect, thinking and response is not identical. Every drug has various actions on various body systems. The actions which aren't desirable is labelled as side effects! No medicine is free of side effects otherwise it must be an inert placebo or must be containing minimal or suboptimal active ingredient. The drug approved for particular use will have minimum side effects and maximum benefits for majority of the patients.

Likewise, every surgery however small and technically perfect surgery may be, has documented percentage of complications. Some of the complications related to the **disease** include severity, duration, stage, nature of the disease and involved organ. **Patient's** age, sex, general condition, co-morbidity, immune status, multiple organ involvement, previous surgery, compromised blood supply and bleeding disorders, abnormal healing process are some of the patient factors affecting the outcome. The **technical factors** include local conditions like adhesions, abnormal position and anatomy, prolonged surgery, system failure/ malfunction etc... Any surgical management is decided after considering the merits and demerits of each procedure and analysing the risks and benefits of the surgery by all the stakeholders.

8. Is the laparoscopic surgery advantageous in children?

Definitely it's advantageous in the newborn and children. Due to advancements in miniaturised laparoscopic instruments and high-definition camera and monitor systems, it offers unmatched vis definition and accuracy of tissues with amplification of images to many folds which improves safety and accuracy of surgical procedures. The other added advantages are less trauma to tissues, lesser blood loss, lesser pain, lesser duration of hospital stays and drugs, very tiny scars and more importantly very minimal or no effect on the developing musculoskeletal system.

9. Is Video Assisted Thoracoscopic surgery (VATS) advantageous in children?

Definitely yes! As explained in the previous Q&A (8), VATS is helpful in avoiding the chest and spinal deformity and preserving the lung function and compliance.