Pediatric | Pediatric Surgery

Pediatric Treatments (Medical)

1. General Pediatric Care

- Well-Baby Checkups: Growth monitoring, immunizations, and developmental screenings.
- Vaccinations: Routine immunizations according to national schedules (e.g., MMR, DTP, polio).
- **Nutritional Guidance:** For malnutrition, obesity, or feeding problems.
- Infectious Diseases Treatment: Antibiotics, antivirals, and antipyretics for illnesses like pneumonia, dengue, typhoid, or viral fever.

2. Neonatal Care

- NICU (Neonatal Intensive Care Unit): Care for premature or critically ill newborns.
- Treatment for Neonatal Jaundice: Phototherapy and exchange transfusions.
- Management of Respiratory Distress Syndrome (RDS): Oxygen therapy, surfactant replacement, and mechanical ventilation.

3. Respiratory and Allergic Conditions

- Asthma Management: Inhalers, nebulization, and long-term control medications.
- Allergy Treatment: Antihistamines, immunotherapy, and allergen avoidance strategies.
- Bronchiolitis and Pneumonia: Supportive care, antibiotics, and antivirals.

4. Gastrointestinal Disorders

- Treatment for Gastroenteritis: Rehydration therapy (oral or IV fluids).
- Management of Constipation and Reflux: Dietary changes, medications.
- Hepatitis and Liver Disorders: Supportive care and antiviral therapies.

5. Cardiovascular Disorders

- Congenital Heart Defects: Monitoring and referral for surgical correction.
- Rheumatic Heart Disease: Antibiotics and anti-inflammatory drugs.
- Kawasaki Disease: Intravenous immunoglobulin (IVIG) and aspirin therapy.

6. Neurological Disorders

- **Seizure Management:** Antiepileptic drugs and emergency seizure control.
- Cerebral Palsy: Physiotherapy, occupational therapy, and botulinum toxin injections.
- Developmental Delay Management: Early intervention programs and therapies.

7. Endocrinological Conditions

- **Diabetes Mellitus:** Insulin therapy and dietary management.
- **Growth Hormone Deficiency:** Hormone replacement therapy.
- Thyroid Disorders: Management of hypothyroidism or hyperthyroidism.

8. Hematological Disorders

- Anemia: Iron supplements, folic acid, or blood transfusions.
- **Hemophilia:** Clotting factor replacement therapy.
- Sickle Cell Disease: Pain management, hydroxyurea, and transfusions.

9. Infectious Diseases

- Treatment of Tuberculosis (TB): Antitubercular therapy.
- **HIV/AIDS:** Antiretroviral therapy (ART).
- Parasitic Infections: Antimalarials and antiparasitic medications.

10. Behavioral and Developmental Disorders

- ADHD (Attention Deficit Hyperactivity Disorder): Behavioral therapy and medications.
- **Autism Spectrum Disorder (ASD):** Speech therapy, behavioral interventions, and sensory integration therapy.

Pediatric Surgery Treatments

1. Neonatal Surgery

- Congenital Diaphragmatic Hernia: Repair of herniated abdominal organs.
- Esophageal Atresia and Tracheoesophageal Fistula: Surgical correction.
- Gastroschisis and Omphalocele: Repair of abdominal wall defects.
- Intestinal Atresia or Stenosis: Removal of the blocked section of the intestine.

2. Abdominal and Gastrointestinal Surgery

- Appendectomy: Removal of the appendix for appendicitis.
- **Pyloromyotomy:** Surgery for hypertrophic pyloric stenosis.
- **Hirschsprung's Disease:** Removal of the non-functional bowel segment.
- Intussusception: Reduction via surgery or air/contrast enema.
- **Biliary Atresia:** Kasai procedure or liver transplantation.

3. Urological Surgery

- **Hypospadias Repair:** Reconstruction of the urethra.
- **Vesicoureteral Reflux:** Surgical correction to prevent kidney damage.

- Undescended Testes (Cryptorchidism): Orchidopexy to reposition the testes.
- Posterior Urethral Valves: Endoscopic valve ablation.

4. Cardiothoracic Surgery

- Congenital Heart Defect Repairs: Closure of septal defects (ASD, VSD) or correction of tetralogy of Fallot.
- Patent Ductus Arteriosus (PDA) Ligation: Closing a persistent fetal blood vessel.
- Coarctation of the Aorta: Surgical repair of narrowing in the aorta.

5. Orthopedic Surgery

- Clubfoot Correction: Ponseti method or surgery.
- **Developmental Dysplasia of the Hip (DDH):** Closed or open reduction.
- Fracture Treatment: Surgical or non-surgical management of pediatric fractures.

6. Oncology Surgery

- Removal of Tumors: Resection of pediatric cancers (e.g., Wilms tumor, neuroblastoma).
- Lymph Node Biopsy or Excision: For diagnosis and treatment.

7. Trauma Surgery

- Emergency Treatment for Injuries: Management of fractures, abdominal or head trauma.
- Wound Repair: Surgical closure or skin grafting.

8. ENT Surgery

- Tonsillectomy and Adenoidectomy: For recurrent infections or obstructive sleep apnea.
- **Tympanostomy Tubes:** For recurrent ear infections or hearing loss.
- Laryngotracheal Reconstruction: For airway narrowing.

9. Neurosurgery

- Hydrocephalus Treatment: Shunt placement or endoscopic third ventriculostomy.
- Spina Bifida Repair: Closure of the neural tube defect.
- **Brain Tumor Removal:** Surgery for pediatric brain tumors.

10. Plastic and Reconstructive Surgery

- Cleft Lip and Palate Repair: Surgical correction.
- **Burn Treatment:** Skin grafting and reconstructive procedures.
- Hand Malformations: Correction of polydactyly, syndactyly, or other deformities.