Embryology of Malformations. Perinatal Physiology.

Clinical Anatomy of the Newborn.

Epidemiology of Congenital Malformations.

Prenatal Diagnosis of Surgical Conditions.

Fetal Counselling for Surgical Malformations.

Fetal and Birth Trauma.

Transport of the Surgical Neonate.

Specific Risks for the Preterm Infant.

Preoperative Assessment.

Anaesthesia.

Postoperative Management.

Fluid and Electrolyte balance in the Newborn.

Nutrition.

Access to Enteral Nutrition.

Stomas of Small and Large Intestine.

Vascular Access in the Newborn.

Radiology.

Immune System.

Sepsis.

Hematological Problems.

Genetics in Neonatal Surgical Practice.

Ethical Considerations.

Surgical Safety.

Principles of Minimally Invasive Neonatal Surgery.

Fetal Surgery.

Tissue Engineering and Stem Cell Research.

Surgical Implications of HIV.

Liver Transplantation.

Choanal Atresia.

Pierre Robin Sequence.

Macroglossia.

Tracheostomy in Infants.

Mediastinal Masses in the Newborn. Congenital Airway Malformations. Vascular rings. Pulmonary air leaks. Chylothorax and other pleural effusions in neonates. Congenital malformations of the lung. Congenital diaphrahragmatic hernia. Extracorporeal membraneoxygenation for neonatal respiratory failure. Bronchoscopy in the Newborn. Esophageal atresia and tracho-esophageal fistula. Congenital esophageal stenosis. Esophageal duplication cysts. Esophageal perforation. Gastro-esophageal reflux. Pyloric atresia and prepyloric antral diaphragm. Hypertrophic pyloric stenosis. Gastric volvulus. Gastric perforation. Duodenal obstruction. Malrotation. Persistent hypperinsulinemic hyppoglyycemia of infancy. Jejuno-ileal atresia and stenosis. Colonic and rectal atresias. Meconium ileus. Meconium peritonitis. Duplications of the Alimentary Tract. Mesenteric and omental cysts. Neonatal ascites. Necrotizing enterocolitis.

Cysts and Sinuses of the Neck.

Congenital Thoracic Deformities.

Stridor in the Newborn.

Spontaneous intestinal perforation. Hirschprung's Disease. Anorectal anomalies. Congenital Pouch Colon. Congenital segmental dilatation of the intestine. Intussusception. Inguinal hernia. Short Bowel syndromeand surgical techniques for the baby with short intestines. Megacystis Microcolon Intestinal Hypoperistalsis Syndrome. Biliary Atresia. Congenital biliary dilatation (Choledochal cyst). Hepatic cysts and abscesses. Omphalocele and gastroschisis. Omphalomesenteric duct remnants. Bladder exstrophy. Cloacal exstrophy. Prune belly syndrome. Conjoined Twins. Epidemiology and genetic associations of neonatal tumors. Hemangiomas and vascular malformations. Congenital nevi. Lymphatic malformations (cystic hygroma). Cervical teratomas. Sacrococcygeal Teratoma. Nasal tumors. Neuroblastoma. Soft-tissue sarcoma. Hepatic tumors. Congenital mesoblastic nephroma and Wilms' tumor. Neonatal ovarian tumors. Spina bifida and encephalocele. Hydrocephalus.

Urinary Tract Infections.

Imaging of the renal tract.

Management of Antenatally detected hydronephrosis.

Multicystic dysplastic kidney.

Upper Urinary Tract Obstructions.

Duplication anomalies.

Vesicoureteral Reflux.

Ureteroceles.

Posterior Urethral Valves.

Neuropathic bladder.

Hydrometrocolpos Disorders of Sexual Development.

Male genital anomalies