

Introduction

INTRODUCTION

Neonatal surgeons are paediatric surgeons who manage life-threatening non-cardiac congenital anomalies and the acquired condition necrotising enterocolitis (NEC), seen in premature babies. Structural anomalies are associated with gene defects, aneuploidies (abnormal number of chromosomes), infections (e.g. toxoplasmosis, cytomegalovirus, rubella) and teratogens (e.g. drugs, smoking, alcohol). Late mechanical aetiologies are illustrated by ileal volvulus in cystic fibrosis, some lung hypoplasia in congenital diaphragmatic hernias and small intestine loss in closing gastroschisis. Insults acting during gastrulation – when cells are told what to do and where to go – may cause multiple anomalies, e.g. VACTERL syndrome (vertebral, anal, cardiac, tracheo-oesophageal, renal and limb anomalies) and CHARGE syndrome (coloboma, defects, choanal atresia, growth retardation, genital anomalies and ear anomalies). See Chapter 44 for neural tube defects and Chapter 59 for heart defects. See Chapter 48 for the overlap with general surgery of childhood. Table 18.1 illustrates the need for careful examination, imaging and genetic investigations to screen for associations when an anomaly is found. When well-recognised anomalies are identified antenatally, neonatal surgeons, working with fetal medicine specialists and neonatologists, counsel parents about prognosis and postnatal surgical management. Friedrich Trendelenburg, 1844–1924, Professor of Surgery successively at Rostock (1875–1882), Bonn (1882–1895), Leipzig (1895–1911), Germany. The Trendelenburg position was first described in 1885.

Outline the presentation and management of necrotising enterocolitis Describe two newborn tumours • Explain why adult surgeons need an overview of neonatal surgery

Revision #1

Created 2025-12-31 15:09:54 UTC by Omar Ayman

Updated 2025-12-31 15:09:54 UTC by Omar Ayman