COMMON PRESENTATIONS AND CONDITIONS

Basic Trainees will require a sufficient depth of knowledge of these presentations and conditions.

- Antenatal conditions such as cerebral ventricular dilatation, choroid plexus cysts, and echogenic foci in heart or bowel
- Birth trauma, such as clavicular fracture, brachial plexus palsy, and cephalhaematoma
- Common congenital malformations such as cleft lip or palate, Pierre-Robin sequence, sacral dimples, and finger anomalies
- Congenital anomalies of the kidney and urinary tract
- Congenital and acquired neonatal infection:
  - central line associated blood stream infections
  - congenital pneumonia
  - conjunctivitis
  - group B streptococcal sepsis
  - gram negative sepsis
  - meningitis
  - perinatal infections such as TORCH infections (Toxoplasmosis; Other (syphilis); Rubella; Cytomegalovirus (CMV); Herpes simplex virus (HSV))
  - skin infections
- Congenital heart disease
- Cyanosis
- Developmental dysplasia of the hips
- Eye problems:
  - congenital cataracts
  - congenital glaucoma
  - nasolacrimal duct obstruction
  - retinoblastoma
- Haematological conditions:
  - acute bleeding disorders, including vitamin K deficient bleeding in the newborn
  - disseminated intravascular coagulation (DIC)
  - hereditary spherocytosis
  - neonatal anaemia
  - neonatal thrombocytopenia
  - neutropaenia
- Hypoxic ischaemic encephalopathy
- Hypoglycaemia
- Important chromosomal and genetic

For all common presentations, Basic Trainees will need to know how to:

**Synthesise**
- incorporate epidemiology, pathophysiology and clinical science
- recognise the clinical presentation
- take a relevant clinical history
- conduct an appropriate examination
- establish a differential diagnosis
- plan and arrange appropriate investigations

**Manage**
- provide initial, evidence-based management
- discuss the principles of ongoing management
- apply quality use of medicines
- recognise potential complications of the disease and its management, and initiate preventative strategies
- refer appropriately

**Consider other factors**
- identify broader considerations and their impact on diagnosis and management
conditions
» 22q11 deletion
» trisomy 21

- Intrauterine growth restriction and/or small for gestational age
- Jaundice
- Maternal health affecting the newborn such as thyroid disease, diabetes
- Neonatal abstinence syndrome
- Neonatal respiratory and lung disorders
  » congenital lung abnormalities
  » meconium aspiration syndrome
  » respiratory distress syndrome
  » transient tachypnoea of the newborn (retained foetal lung fluid)
  » air leak syndromes:
    o pneumomediastinum
    o pneumothorax
    o pulmonary interstitial emphysema
- Persistent pulmonary hypertension
- Plagiocephaly
- Preterm neonates and associated complications:
  » anaemia
  » apnoea
  » chronic neonatal lung disease
  » electrolyte disturbances
  » intraventricular haemorrhage
  » metabolic bone disease
  » necrotising enterocolitis
  » patent ductus arteriosus
  » periventricular leukomalacia
  » retinopathy of prematurity
- Seizures
- Shock
- Skin abnormalities in the newborn period, such as haemangioma and benign skin lesions
- Surgical problems in the newborn:
  » abdominal wall defects
    o abdominal atresia
    o gastroschisis
    o omphalocele
  » anorectal malformations
  » atresia
    o duodenal
LESS COMMON OR MORE COMPLEX PRESENTATIONS AND CONDITIONS

Basic Trainees will need to have an awareness of, and an understanding of appropriate resources that should be used to help manage patients with these presentations and conditions.

- Ambiguous genitalia and intersex disorders
- Congenital brain abnormalities
- Congenital diaphragmatic hernia
- Congenital eye abnormalities
- Congenital skin disorders such as ichthyosis and epidermolysis
- Neural tube defects
- Perinatal stroke

For all less common and more complex presentations, Basic Trainees will need to know how to:

**Synthesise**
- incorporate epidemiology, pathophysiology and clinical science
- recognise the clinical presentation
- take a relevant clinical history
- conduct an appropriate examination
- establish a provisional diagnosis
- plan and arrange appropriate initial investigations

**Manage**
- initiate therapy in consultation
- discuss broad therapeutic options
- recognise potential complications
- refer appropriately

**Consider other factors**
- identify broader considerations and their impact on diagnosis and management

EPIDEMIOLOGY, PATHOPHYSIOLOGY AND CLINICAL SCIENCE

Basic Trainees will be able to describe the principles of the foundational sciences.

- Breastfeeding, principles associated with successful initiation and maintenance
- Effects of intrauterine and perinatal events on outcome
- Fluid management
- Infant maternal attachment
- Infection prevention and control
- Neonatal resuscitation and mechanical ventilation
- Pathophysiology of common and important neonatal presentations including jaundice, lethargy, acute respiratory distress, cyanosis, shock, vomiting and seizures
- Pathophysiology of prematurity
- Physiology of extra uterine adaptation, including initiation of feeding, and changes to cardiac and respiratory physiology
- Principles of drug metabolism in the newborn and breastfeeding mother, and appropriate and safe prescribing
- Therapeutic hypothermia

**INVESTIGATIONS AND PROCEDURES**
Basic Trainees will know how to select and interpret the results of these investigations and procedures.

- Scanning for antenatal conditions such as cerebral ventricular dilatation, choroid plexus cysts, echogenic foci in heart or bowel
- Catheterisation:
  - intravenous
  - intra-arterial
  - umbilical vascular
- Basic neonatal imaging such as X-ray of the chest and abdomen
- Lumbar puncture
- Newborn infant resuscitation including intubation and initiation of mechanical ventilation
- Pleural aspiration and drainage
- Suprapubic aspirate

**IMPORTANT SPECIFIC ISSUES**
Basic Trainees will be able to identify important specialty-specific issues and their impact on diagnosis and management.

- Breastfeeding problems, awareness of, and recognition of when to refer to additional services such as lactation consultant
- Problems of addiction and their impact on the fetus and the newborn
- Gestational age assessment based on physical examination
- Infant nutrition
- Infant maternal attachment
- Newborn Screening program, explanation and understanding of screening programs, including:
  - healthy hearing
  - hip assessment and screening ultrasound
  - inborn errors of metabolism
- Principles behind immunisation and vitamin K at birth
- Post-natal depression, awareness of
- Transport and retrieval indications and issues

**LEARNING METHODS**
Suggested opportunities, activities, and resources to assist with learning.

- Clinical experience in perinatal care and with neonates in a range of settings, including neonatal intensive care
- Advise parents about the risks and possible physical and psychosocial consequences of preterm birth
- Take an obstetric and newborn history, including a feeding history
- Midwifery education sessions on lactation and maternal-infant mental health
- Neonatal resuscitation training such as
  - neoResus [www.neoressus.org.au](http://www.neoressus.org.au)
  - Neonatal Resuscitation Program (NRP) [netswa.net.au/research-education/education](https://netswa.net.au/research-education/education) (WA)
- Participation in preparation of an infant for transfer

Textbooks
- Sadler TW. Langman's Medical Embryology. 13th ed. Philadelphia:
- Goldsmith JP, Karotkin EH. Assisted Ventilation of the Neonate. 5th ed, St. Louis: Elsevier Saunders; 2011
- Walker M. Breastfeeding Management for the Clinician: Using the Evidence. 2nd ed. Sudbury: Jones and Bartlett; 2011.