

# REGROUPING 2

## Congenital & Pediatric

# CONGENITAL & PAEDIATRIC

18.02.05

## **Preamble - Objectives and Outcomes**

ALSO SEE OVERALL PREAMBLE (hypertext link on webpage)

Many children and young adults experience congenital health problems which require plastic and/or reconstructive surgery to enable them to function normally. To be effective in this area a surgeon requires technical skill, medical expertise and the capacity to respond effectively to their patients' needs and expectations.

### The graduating trainee will be able to:

- Consistently demonstrate sound surgical skills
- Maintain skills and learn new skills
- Effectively manage complications
- Manage complexity and uncertainty
- Appraise and interpret plain radiographs, CT and MRI against patients' needs
- Communicate information to patients (and their family) about procedures, potentialities and risks associated with surgery in ways that encourage their participation in informed decision making
- Develop a care plan for a patient in collaboration with members of an interdisciplinary team
- Promote health maintenance
- Draw on different kinds of knowledge in order to weigh up patient's problems in terms of context, issues, needs and consequences

*For Recommended Reading, Delivery and Assessment see the module for each body zone*

**Revisional Knowledge** following on from that gained from the PRS Science and Principles Module trainees are required to be able to analyse and appropriately apply the science and principles of the following in clinical environments:

### Craniomaxillofacial

#### *Craniomaxillofacial embryology, anatomy, genetics*

- Pathogenesis of craniofacial clefts and their classification
- Perioperative management of neurosurgical/orbital surgical/major facial surgical patients (including paediatric)

### Trunk, Perineum & Breast

#### *Embryology*

- Urogenital embryology – male, female, androgenic influence
- Breast embryology

#### *Congenital Defects and their classification*

- Spina bifida
- Gastroschisis, omphalocele, Prune-belly
- Pectus excavatum, pectus carinatum, Poland syndrome.
- Urogenital – developmental anomalies

**Core Knowledge** — detailed knowledge and technical expertise is expected in these areas. All trainees are required to be able to diagnose, plan, effectively perform and manage:

### Plastic & Reconstructive Surgical Science & Principles

#### *Clinical Care*

- Perioperative care and analgesia
  - Paediatric (drug doses, fluid and nutritional management)

#### *Pathology*

- Genetics in Plastic & Reconstructive Surgery
- Pathology of congenital anomalies – vascular anomalies, haematomas, cleft, craniofacial, hand

#### *Anatomy*

- Developmental anomalies

### Craniofacial

#### Congenital disorders and disorders of growth

- Craniosynostosis
  - Aetiology
  - Pathophysiology
  - Classification
  - Common syndromes (assessment and management in outline)
- First and second branchial arch anomalies/hemifacial microsomia/oculoauriculovertebral spectrum. Other facial asymmetries (assessment and management in detail)
- Treacher Collins syndrome, Binders syndrome (assessment and management in detail)
- Craniofacial clefts (assessment and management in outline)
- Pierre Robin sequence (assessment and management in detail)
- Cleft lip and palate aetiology, pathophysiology, classification, associated syndromes (assessment and management in detail, including speech and hearing problems, secondary deformities, and multidisciplinary management in detail)

### Facial Soft Tissue

#### *Face, Neck & Brow*

- Pathophysiology, embryology and abnormalities, and the diagnosis, investigation and treatment of:
  - Congenital deformities

#### *Eyelids*

- Pathophysiology, embryology, anatomy and abnormalities and the diagnosis, investigation and treatment and reconstruction of:
  - Congenital deformities

#### *Ears*

- Pathophysiology, embryology, anatomy and abnormalities and the diagnosis, investigation and treatment of:
  - Congenital deformities
  - Associated syndromes
- Reconstructive procedures for complete and partial ear absence and earlobe loss

### *Nose*

- Pathophysiology, embryology and development, anatomy and abnormalities and the diagnosis, investigation and treatment of:
  - Congenital deformities
  - Associated syndromes

### *Lips*

- Pathophysiology, embryology and development, anatomy and abnormalities and the diagnosis, investigation and treatment of:
  - Congenital deformities
  - Associated syndromes

### Hand, Upper Limb & Microsurgery

- Congenital anomalies – classification, assessment and principles of treatment.

### Lower Limb and Foot

- Lymphoedema (paediatric)
- Vascular malformations (adult and paediatric)
- Syndactyly

### Trunk, Perineum & Breast

#### *Trunk*

Sternal defects (congenital and acquired)

- Pectus excavatum, pectus carinatum,
- Poland's syndrome, infection, tumour, post cardiac surgery

*Abdominal defects (congenital and acquired)*

- Gastrochisis, omphalocele, Prune-Belly, tumour, infection, trauma, hernia

*Back defects (congenital and acquired)*

- Spina bifida, trauma, tumour

#### *Perineum*

Circumcision

- Any safe technique
- Conservative circ vs radical
- Tailoring the foreskin

Vaginal disorders and reconstruction principles

- evaluate patient indications and assess treatment options - congenital, gender reassignment, surgical resection

#### *Breast*

- Principles of aesthetics and breast ageing
- Breast disorders – developmental - amastia, polymastia, hypoplasia
  - Treatment options and management of:
    - Poland's syndrome
    - Hypertrophy
    - Tuberous

**Outline Knowledge** — in this area, knowledge of only the principles is required. Detailed knowledge and technical expertise in these topics is appropriate for subspecialist post FRACS fellowship training. Therefore trainees are expected to be able to describe and discuss treatment options and management of:-

#### Craniomaxillofacial

- Surgical management of craniosynostosis and craniosynostosis syndromes, timing, operative procedures
- Orbital dystopia – causes, assessment, management
- Jaw and dental deformities – relevant embryology, anatomy and pathophysiology
- Occlusion and malocclusion
- Assessment methods of facial disharmony
- Cephalometrics
- Pre-surgical analysis and planning for orthognathic surgery
- Temporomandibular joint problems and management
- Surgical techniques, osteotomies of cranium, jaws, periorbital (eg hypertelorism), skeletal augmentation
- Safety, complications, limitations of surgical treatment
- Psychological considerations

#### Hand, Upper Limb & Microsurgery

- Congenital and other paediatric anomalies – detailed management of all conditions listed in Swanson's classification. Growth plate anomalies.

#### Lower Limb and Foot

- Congenital pseudarthrosis

#### Trunk, Perineum & Breast

- Discuss/explain in detail uncommon perforator flap harvest