

# ***General Surgery of Childhood Module***

## **Introduction and Background**

This module is designed for SpRs enrolled on to training programmes in general surgery. It sets out the specific requirements for training in the General Surgery of Childhood (GSC) to a level appropriate for practice in a large district general hospital. It should be taken in conjunction with the curriculum for specialist training in general surgery and has been agreed with the SAC in paediatric surgery. In order to maximise the training opportunities the manner in which the module is delivered is left flexible. The following points should, however, be borne in mind:

- Paediatric surgical practice is not something to be undertaken lightly and requires specific expertise, which is additional to much of that required for the practice of general surgery in adults. This module would, therefore, be inappropriate for SpRs in the first three years of their training.
- The aim is to produce a general surgeon who would be capable of providing general surgical care for children within a DGH setting.
- As with any training, this module should not be undertaken in isolation but ideally should be taken in the context of a steady exposure to this type of practice during the latter years of training. This is not to be considered as an absolute requirement but is considered highly desirable.
- Delivery of this training module exclusively through specialist paediatric surgical units (SPSUs) is not mandatory, but the requirements of the training package will make it difficult for the majority of DGH paediatric services to deliver the whole module. It is also considered important that there is input to the assessment process by a recognised paediatric surgeon. It is likely, therefore, that the majority of these training 'slots' will be based exclusively at an SPSU, but there is flexibility to construct programmes that are delivered through a combination of DGH and specialist unit.
- There may be opportunities to deliver this module in parallel with a one-year attachment to a DGH for general or specialist training in general surgery.

## **Specialist Paediatric Surgical Units and Groupings**

Royal Aberdeen Children's Hospital  
Glasgow/Edinburgh/Newcastle  
Leeds/Sheffield/Nottingham  
Liverpool/Manchester  
Birmingham/Bristol/Cardiff  
Southampton/Thames Regions (London)/Oxford  
Belfast/Dublin  
Norwich  
Brighton  
Hull  
Leicester Royal Infirmary

## **Profile of Paediatric Practice in the DGH**

There is no fixed pattern for the practice of a surgeon providing a service in GSC. It is highly variable and depends very much upon factors such as traditional local practices, the provision

of paediatric services within the hospital, the attitude of the local paediatric colleagues, the supporting infrastructure (particularly anaesthetic expertise), the size of the population served and the proximity of the nearest specialist unit. Not least of all it depends on the expertise, drive and enthusiasm of the surgeon or surgeons providing the service.

The Children's Surgical Forum has set out minimum standards to which it expects GSC to be conducted in district general hospitals ('Children's Surgery – a First Class Service. Report of the Paediatric Forum of The Royal College Surgeons of England. May 2000').

These guidelines apply to the treatment of children up to the age of 16.

Neonates should normally be referred to a specialist unit.

It should be emphasised that the provision of these services is a partnership between the general surgeons involved and their colleagues in the local specialist unit. This relationship is pivotal and it is self-evident that it must be one of mutual support, trust and openness. This is reflected in the recommendations for the delivery and assessment of this module.

On successful completion of this module the SpR will be:

- Competent to provide a service in the elective general surgery of childhood
- Competent to provide a service in the emergency general surgery of childhood
- Understand the threshold for referral to a specialist paediatric centre
- Understand the infrastructure necessary to support this practice in a DGH setting

The curriculum may be delivered from approved posts:

- In an approved specialist paediatric unit
- Through a combination of an approved district general hospital and SPSU

The range of elective conditions which are encompassed within the general surgery of childhood include the following:

Assessment and management of:

Conditions of the testes

Inguinal hernia and hydrocele

Umbilical and paraumbilical hernia

Conditions of the foreskin

Minor anal Conditions

Common cutaneous and subcutaneous swellings

Lymphadenopathy

The range of emergency conditions which are encompassed within the general surgery of childhood include the following:

The assessment and management of:

Abdominal pain in childhood

The acute abdomen in childhood

Constipation in childhood

Acute conditions of the testis and scrotum

During their DGH training, all SpRs training in general surgery should be involved in the emergency care of children.

## **Specific Clinical Skills**

The assessment of children in outpatients and communication with parents and the child.

Dealing with the issues of consent for treatment in childhood.

The assessment and review of ward admissions and referrals (emergency and elective).

Resuscitation, pre operative assessment, fluid and electrolyte balance.

Post operative care.

Communications with paediatric colleagues.

Recognition and appropriate management of the acutely sick child.

Dealing with distressed parents

Recognition of the point at which referral to a specialist paediatric unit is appropriate.

## **Operative Skills – Competence in Performing:**

### **Core Procedures**

Inguinal herniotomy/ligation of patent processus vaginalis (20)\*

Umbilical and paraumbilical hernia repair (5)

Orchidopexy (10)

Testicular torsion, including torsions of the hydatid(5)

Appendicectomy – open (10)

Circumcision and foreskin preserving procedures (15)

Pyloromyotomy (6)

I & D of common abscess (5)

\*(The figures within brackets are a guide to the minimum number of procedures to which the trainee should be exposed at PA or P level. It is expected that the trainee will be passed out as competent to perform these procedures at the completion of the training module)

### **Optional Procedures**

Appendicectomy – laparoscopic

Central venous access in children

Endoscopy - gastroscopy

Surgery for ingrowing toenail

Diagnostic laparoscopy

Gastrostomy

## **Knowledge and Understanding of:**

Fluid management in children

Common congenital abnormalities, including: branchial arch and other head and neck anomalies, surgical consequences of spina bifida and cerebral palsy, abnormalities of the

pudenda

Acute abdominal conditions in children including intussusception, acute inguinal hernias and the acute scrotum

The significance of bilious vomiting in childhood including malrotation

Pain control in children

Peri-operative care and monitoring and transport

Communicating effectively with children and parents

Constipation and soiling

Gastro-oesophageal reflux

Trauma in childhood

Abdominal and scrotal trauma

Sepsis in infancy and childhood

Recognition of and understand the management of solid organ

Malignancy of childhood

Common urological conditions (VUR, obstructive uropathy, UTI)

Patterns of lymph node enlargement in children

Developmental milestones

Non-accidental injury

Management of acutely raised intracranial pressure due to trauma or blocked shunts

## **Professional Skills**

As for the curriculum for specialty training in general surgery, with particular emphasis on team working skills and effective communication with relatives and colleagues.

## **Academic Targets**

Familiarity with the Paediatric Specialty Journals [JPS/PSI] and standard texts. This is not to be taken as specifying a detailed knowledge of content, but indicates that the trainee should know that these sources exist and should have had some practice in accessing and using them as appropriate.

Attendance at either an APLS or PALS course is mandatory at some point in training.

## **Assessment**

The method of assessment will depend on the manner in which the module is delivered. The principles are as follows:

The assessment will be conducted within the umbrella of the RITA process for general surgery.

There will be a designated educational supervisor who will:

Take overall responsibility for ensuring that the core curriculum is delivered during the training attachment.

Carry out in-service assessment in the same manner as is in general use for trainees in surgery at present.

Sign off as 'competent to perform without direct supervision' the core skills outlined in the curriculum.

Regardless of how training is delivered, it is highly desirable that there is substantial input into the assessment process by a specialist general paediatric surgeon(s).

There should be agreement regarding this process between the regional programme directors of both general and paediatric training rotations.

The assessment process could, for example, be:

- Carried out entirely during the module taken at a specialist paediatric surgical unit, reporting to the RITA panel in general surgery as for trainees on other placements in the general surgical rotation.
- A regular formal assessment by the specialist paediatric surgeons, built into a training module based in a DGH.
- Conducted through the RITA system that is already operating for general surgery, with additional scrutiny of the papers by the paediatric RITA panels or programme director.
- Exceptionally, devolved, with the agreement of the paediatric programme director, to the educational supervisor in the DGH and conducted solely through the RITA system that is already operating for general surgery.

Denis Wilkins  
For the SAC in General Surgery  
September 2002