

A CURRICULUM FOR HIGHER SURGICAL TRAINING IN NEUROSURGERY

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This Curriculum is a supplement to the manual of Higher Surgical Training in the United Kingdom and Ireland (May 1996)

1. Definition

Neurosurgery is a discipline which deals with the diagnosis, evaluation and treatment of pathological processes which affect the nervous system. Neurosurgery includes the operative, non operative, intensive care management, and rehabilitation of patients with disorders of the cranium, spine and nervous system.

2. Objectives

The completed training programme must result in the trainees being capable of:-

- 2.1. being eligible for consultant appointment in the NHS as judged by the ability to;
 - 2.1.1. Practice general neurosurgery competently and independently including the provision of continuity of care for patients
 - 2.1.2. Practice with special expertise in at least one of the subspecialties and/or research
- 2.2. contribute to service and/or academic development in the speciality

3. Requirements for Entry into Higher Surgical Training

Trainees will be expected to have completed their basic surgical training and passed either the FRCS, MRCS, AFRCS or their recognised equivalents as determined jointly by the Surgical Royal Colleges.

4. Programme Principles

Higher neurosurgical training is of 6 years minimum duration consisting of:-

- 4.1. 5 years in clinical neurological surgery and
- 4.2. a minimum of 1 year in which options would be taken;-
 - 4.2.1. up to 6 months neurology, neuroradiology, neuropathology, or neurophysiology - more than one could be taken
 - 4.2.2. Research (Research experience in the neurosciences prior to entering Higher Surgical Training in neurosurgery may be taken into consideration by the SAC)
 - 4.2.3. Sub-specialisation
 - 4.2.4. Overseas experience

The majority of trainees will spend up to 2 years undertaking neuroscience options. Timing of these may vary but subspecialty training and overseas experience will normally occur after the fifth year of general neurosurgical training.

5. Programme Requirements

Each training programme must have SAC approval. The intervals between SAC inspections will be no longer than 4 years and any major change, in the Unit or the programme, occurring between inspections will initiate a new inspection. Each trainee will be expected to be exposed to all aspects of neurosurgery and hence it may be necessary for some Units to pair on a formal basis to provide a complete programme.

6. Assessments/Monitoring during Higher Surgical Training

In addition to the 6 month, 1 year and annual assessments by the Deanery Specialty Training Committee, the SAC will interview all trainees during their third year of training. When problems in training arise, additional interviews may be required. The SAC will recommend to the JCHST as to whether the trainee should be granted the CCST, at the end of the 6th year. To gain the CCST the trainee will have to:-

- 6.1. show in his/her logbook that:-
he/she has assisted at a wide range of cases,
there have been consultant assisted procedures, and personal cases have been done.

Median case numbers for each category done with assistance and personally together with the range are available from the SAC and the Regional Training Co-ordinators. Each trainee would be expected to achieve the median in the majority of operations on the appended list.

- 6.2. have completed 5 years of general neurosurgical training and 1 year of options
- 6.3. pass the Intercollegiate Board examination and
- 6.4. receive references from all the trainers indicating a generally satisfactory performance.

7. Training Programme

Because of the hours available for training in the practical aspects of patient management including operative surgery and the variations in individual trainees, the programme is not too prescriptive with respect to each individual year of training. General principles however apply and include:-

- 7.1. In the first 2 years the trainee must become competent at history taking, neurological examination, assessment of clinical problems, non operative management, neurosurgical intensive care, interpretation of neuroradiological, neuropathological and other neuroscience investigations and the basics of operating for example, should be able to perform a craniotomy for virtually all the cranial trauma and malignant tumours and be able to carry out shunts and laminectomy for spinal disease. Reading should include standard neurosurgical texts and the major neurosurgical journals.
- 7.2. In years 3 and 4 the range of conditions operated upon should widen with close supervision from the trainers e.g. aneurysms, benign tumours, posterior fossas.

- 7.3. In years 5 and 6 should increase his/her solo experience of more major cases e.g. aneurysms, benign tumours, developing some experience in more specialised fields e.g. skull base surgery, transphenoidal pituitary surgery and pain.
- 7.4. Trainees, especially during the 5th and 6th years would be expected to be involved in the training of more junior Higher Surgical Trainees.
- 7.5. Year 6 as defined under the programme principles. Many trainees will use the year for subspecialty training, overseas experience or research. However if research has been undertaken earlier or other clinical neuroscience options taken up, this year will be used to increase the trainee's neurosurgical experience.

Neuroradiological, neuropathological and neurophysiological experience should be gained in relationship to the cases done in addition to the coverage in the academic programme. Throughout the period of training reading of journals should continue.

Research during the training programme should be supervised by a specific named trainer from the start of the programme. Specific research projects should be supervised by an appropriately qualified person. All trainees including those who do not undertake a specific piece of research will be expected to gain sufficient understanding to be able to assess published work.

8. Academic Programme

The continuous neuroscience programme through out the training period should include:-

- 8.1. Lectures including visiting speakers. Should incorporate some basic neurosciences
- 8.2. Clinical presentations with all neuroscience disciplines
- 8.3. Neuropathology including clinicopathological conferences
- 8.4. Neuroradiological conferences
- 8.5. Journal club
- 8.6. Audit - he/she will take an increasing role in the preparation and presentation
- 8.7. Research meetings
- 8.8. Teaching - will take an increasing role in nursing, paramedical, undergraduate and postgraduate education
- 8.9. Management - to understand the principles of the operation of the internal market, contracting and resource management.

9. Meetings/Courses

It is recommended that trainees attend a meeting of the Society of British Neurosurgeons (SBNS) once a year and should if possible go on the European Association of Neurosurgeons training course.

During their period of training they should also attend a :-

- 9.1. subspecialty course/meeting e.g. spinal, stereotaxy, paediatric, skull base;
- 9.2. neurosurgical fellowship course;
- 9.3. management course.