

GENERAL MEDICAL COMPONENTS OF NEUROLOGY TRAINING

Prepared by: Training & Education Subcommittee of
the Association of British Neurologists

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Introduction

This document provides a pragmatic outline of the minimum general medical (and specifically non-neurological) knowledge and skills considered necessary for neurology trainees (NT) to facilitate their practice of neurology. This document is not intended to alter or supersede current training recommendations as laid down by the JCHMT and its specialist advisory committees or the requirement to achieve the current MRCP as part of training.

There are clearly “overlap” areas, such as sleep medicine, to which neurology trainees should be exposed during their formal neurology training. This document is intended to cover those areas of general medicine which they would not be expected to encounter during the neurological part of their training. It is not intended to be an exhaustive curriculum, and there are already several documents listing core clinical competencies, further details of which may be obtained via:

www.rcplondon.ac.uk/pubs/sho_corecurricforms.htm

<http://www.mmc.nhs.uk/download/Curriculum-for-the-foundation-years-in-postgraduate-education-and-training.pdf>

<http://www.jchmt.org.uk/neuro/index.asp>

The required components are divided into 4 sections, generic knowledge and skills, speciality knowledge and skills, selection and interpretation of tests, and practical procedures, and are based upon the RCP core curriculum document (see reference above). The most important is the generic section, which should largely be acquired during the Foundation Programme and it is assumed that all NTs will have achieved the core clinical competencies proposed in Foundation years 1 and 2 (see MMC website as above) before entering higher specialist training. In the speciality section, the skills which might not be part of the NTs neurological training are outlined.

It is clearly not possible for trainees to pass through all of the specialities mentioned below, and this document should not be interpreted as such: many skills may be achieved in a range of different specialities and in different early training environments.

1. Generic Knowledge and Skills to support:

- Good clinical care
 - History taking, examination and note keeping skills
 - Basic life support
 - Time and risk management, decision making
- Communication skills
 - Within consultations, including delivering bad news
 - Dealing with complaints
 - Communicating with clinical and non-clinical colleagues
- Maintaining good medical practice
 - Requirement for life long learning and education, and the different methods of learning
 - Know how to access relevant evidence and guidelines, the value of audit
- Working with colleagues/teams
- Maintaining trust
 - Ethics and legal issues
 - Professional behaviour
- Teaching and training
 - Including methods of assessment (e.g. miniCEX etc)

2. Speciality skills: Knowledge, understanding and/or skills of/for:

- **Emergency medicine:**
 - Immediate assessment and resuscitation of the acutely ill patient
 - Further immediate management and interpretation of initial investigations
 - Formulating differential diagnosis and timely referral to other specialities as appropriate (e.g. neurosurgeons)
 - Ongoing monitoring and assessment of ill patient
- **Vascular medicine (including cardiology):**
 - Understanding principles of vascular medicine, and the clinical expressions of vascular disease, including aetiology, management, prevention and screening
 - Understanding of surgical and endovascular treatment of vascular disease
 - Cardiac structure and functioning including common causes of myocardial and valvular dysfunction and disorders of rhythm and contractility
 - ECG and echocardiography: ability to interpret results of these
 - Complications of cardiac treatment (e.g. CABG, thrombolysis)
 - Primary and secondary prevention of atherosclerosis
 - Management of hypertension
- **Clinical pharmacology and therapeutics:**
 - Prescribing drugs safely, including knowledge of common adverse effects, drug interactions and contraindications

- Clinical features and management of drug toxicity/overdose (both prescribed, over the counter and illicit). Special situations eg pregnancy, the elderly
- **Dermatology:**
 - Skin lesions applicable to neurology (vasculitic, adverse drug effects, dermatomyositis etc.)
- **Diabetes and endocrine:**
 - Diagnostic criteria for Diabetes Mellitus types 1 and 2
 - Recognition and management of DM emergencies, including hyper- and hypoglycaemia
 - Features, interpretation and management of (where appropriate) electrolyte imbalances
 - Features, and investigation of common endocrine disorders and tests (eg thyroid function)
- **Gastroenterology:**
 - Gut protection with steroid use
 - Decompensated liver disease
 - Diagnosis and management of alcohol withdrawal
 - Non-neurological differential of dysphagia
 - Gastrostomy and parenteral feeding
- **GUM (including urology):**
 - Urinary tract infection
 - Knowledge of ethical issues regarding HIV testing
- **Geriatric medicine:**
 - Importance of multidisciplinary care and safe and appropriate discharge
 - Specific management issues regarding elderly (e.g. response to treatment, pharmacological and therapeutic issues etc)
 - Understanding of multiple disorders and their interaction in the elderly
 - Understanding of common geriatric symptoms with many potential causes (e.g. falls)
- **Haematology:**
 - Recognition and management of life threatening coagulation disorders
 - Prescribing anticoagulants safely and appropriately
 - Pro-coagulant disorders
 - Investigate anaemia
- **Infectious diseases:**
 - ID history taking skills (eg travel history, pets/animal contacts, immunocompromised etc)
 - Emergency management of sepsis, including liaison with microbiology/ID/infection control teams
 - Knowledge of “super” infections in hospital (eg MRSA, C difficile)
 - HIV/AIDS and TB

- Notifiable diseases
- **Medical oncology:**
 - Common cancers and their effects on patients, including prognoses
 - Main oncology treatments (surgery, chemotherapy and radiotherapy)
- **Palliative:**
 - Care of the dying, including liaison with palliative care teams
 - Management of the the dying patient and their family
 - Pain and its management
- **Psychiatry:**
 - Major psychiatric syndromes and their management
 - Identification of depression and anxiety
 - Functional syndromes, including recognition, and management
- **Rehabilitation:**
 - Included mainly within neurology training program
- **Renal:**
 - Major causes and effects of acute and chronic renal failure
 - Different modalities of renal replacement therapies
- **Respiratory:**
 - Acute and chronic respiratory failure
 - Deep vein thrombosis and/Pulmonary embolism
 - Respiratory tract infection
- **Rheumatology:**
 - Significant crossover with neurology (eg vasculitides, myositis etc)
 - Osteoporosis including prevention of steroid induced osteoporosis
 - Common arthropathies and soft tissue disorders
- **Intensive care medicine:**
 - Use of intensive care units, appropriate referral

Section 3: Selection and Interpretation of tests

The neurology trainee should be able to select, request appropriately, and accurately interpret the results of the following investigations:

Bloods

FBC, ESR, haematinics
Urea and electrolytes
Glucose (random/fasting)
Cardiac markers
LFTs
Calcium and Phosphate
Lipids
Autoantibody screen
Coagulation screening
CRP
Arterial blood gases

Imaging

Chest and abdominal Xrays
USS and CT (non-neurological)
VQ scans
DEXA
Radioisotope

Others

Pulmonary function tests
Microbiology results

Section 4: Practical procedures

- Venepuncture (including iv cannula insertion)
- Arterial blood gas sampling
- Basic lung function testing
- ECG
- Bladder catheterisation
- Nasogastric tube placement

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