

WHO, WHY and WHAT?

A medical student guide to Neurology at LGI

WHO works in the Neurology department?

Welcome to the Neurology department. We have put together a small booklet to help you find your way round the department and to make the most of your attachment with us. We are based on ward 21 and have 20 inpatient Neurology beds and a 8 bed Hyper Acute Stroke Unit. There is a day case unit at the end of ward 21 where patients come in for a variety of infusions (steroids, immunoglobulins, mitoxantrone etc), investigations (lumbar punctures) and consultant review.

There are 4 main sub-speciality teams as outlined below but each team also takes acute/general Neurology patients so you will see a variety of different conditions whatever team you are attached to. Each consultant spends 1 week on call at a time when any new patients admitted from A&E will usually go under their care. It is useful to see these patients early on in their admission so you can see how the process of taking a history, examining the patient, choosing appropriate investigations and reaching a provisional diagnosis is performed. You will then be able to track their course on the ward once management has been commenced. This will help you to understand the different aspects of the neurological conditions more clearly.

In the forthcoming pages a list of particular conditions you should aim to see patients with. Understanding the complimentary roles of the different members of the multi-disciplinary team is particularly important in Neurology and we would encourage you to spend time with the nurses and therapists in addition to the doctors. We hope you enjoy your attachment in Neurology and would welcome any feedback you have!

Consultants

Secretary & extension

Stroke team

Dr Bamford	Alison	28118
Dr Hassan	Jayne	28123

Epilepsy team

Dr Goulding	Sue	28127
Dr Dunn	Anne-Marie	26061
Dr Maguire	Rosemary	28132

MS/MND team

Dr Ford	Lin	28122
Dr Lily	Eunice	28232
Dr Jung	Eunice	28232

Movement Disorders

Dr Jamieson	Michelle	23339
Dr Alty	Christina	23258

Registrars

Dr Rahul Konduri
Dr Chisha Weerasinghe
Dr Rachel Newby
Dr Priya Shanmugarajah
Dr Ann Varghese
Dr Jeremy Cosgrove

Teams

Stroke
MS/MND
Movement disorder
MS/MND
Epilepsy

Please meet for teaching sessions with the registrars at the nurses' station on ward 21 and contact the doctor on their mobile through switchboard if they are not there.

SHOs

Matt
Mike
Katie
Sameer
Dan

Other members of the Neurology and Stoke team:

Ward clerk	Angie
Ward sister	Georgie
Day case unit nurse	Jose
Physiotherapy	Moira
Occupational therapy	Hannah and Sarah
Neuropsychology	Amanda Stroud
Speech and Language therapist	Briony
Pharmacists	Jeremy and Sue
Brain Attack Team	Dale, Alistair, Emma, Claire, Max, Lindsey

Other useful telephone numbers:

Ward 21	27421/27221
Day case unit	25227

WHY learn about Neurology?

Disorders of the nervous system include diseases of the brain, spinal cord, peripheral nervous system and muscle. They are common, accounting for 1 in 8 consultations in general practice, 1 in 5 emergency medical hospital admissions and a high proportion of disability in the population. Disorders of the nervous system are relevant not only to the clinical specialities of neurology and neurosurgery but also to psychiatry, general medicine, general practice, anaesthetics, radiology and pathology.

Neurology is an evolving speciality and the last decade has seen a major expansion in understanding of how the brain functions, promoted by an ability to image healthy and disordered brain function, and by greater understanding of the genetics of neurological diseases.

Evidence-based treatments for disorders of the nervous system have proliferated, including disease-modifying medications for previously untreatable disorders (e.g. stroke, multiple sclerosis, motor neuron disease, dementia), interventional radiological techniques and functional neurosurgery. There has also been a growing appreciation of the role of neuro-rehabilitation in the restoration of activity and participation.

WHAT should I learn?

A. History

How to take a neurological history and how to present it verbally and in writing.

B. Examination

How to perform a neurological examination and how to interpret common abnormalities. How to present your findings verbally and in writing.

C. Core clinical knowledge

Basic knowledge of the principles of diagnosis, investigation, early management and (where appropriate) prevention of the following:

Common and/or important conditions

- Headaches (acute new headache, migraine, tension type headaches)
- Epilepsy
- Stroke
- Dementia

- Meningitis and encephalitis
- Parkinsonism and movement disorders
- Multiple sclerosis
- Spinal cord dysfunction
- Peripheral neuropathy (including Guillain-Barré syndrome)
- Neuromuscular disorders (including motor neuron disease, and myasthenia gravis)
- Functional symptoms as presentation of psychological disorder

Emergency neurology

- Sudden loss of consciousness and coma
- Status epilepticus
- Acute confusional state
- Acute new headache
- Acute stroke
- Spinal cord & cauda equina compression

D. Investigation

Know the role of common investigations for disorders of the nervous system, who undertakes them, how they are requested and/or undertaken and how the results are evaluated, in particular:

- use of relevant blood/urine investigations especially in emergency neurology
- CT brain scans
- MRI scanning for spinal cord, root and some brain pathology
- lumbar puncture (including contraindications)

E. Management

Know and understand the principles of treatment including:

- Specific **pharmacological** interventions (eg epilepsy, meningitis, stroke)
- Specific neurosurgical or radiological **interventions** (eg angiogram, brain biopsy)
- **Supportive** treatments including management of ventilation, nutrition/feeding, bladder & bowel, circulation and skin management in the unconscious or paralysed patient
- Contribution of different members of the **multidisciplinary team**: nurses, dieticians, speech & language therapists, physiotherapists and occupational therapists.
- The role of **rehabilitation** in the management of the patient following an acute neurological disorder (eg stroke or head injury) or in the maintenance of ability in chronic neurological disease (eg multiple sclerosis)

*References : Learning about Disorders of the Nervous System
Recommendations for UK Medical Undergraduate Education 2006*

Useful text books

Essential Neurology; Ian Wilkinson; Blackwell Science
Neurological Examination Made Easy; Geraint Fuller; Churchill Livingstone
Basic Neurology; John Gilroy; McGraw-Hill

Useful websites

Parkinson's disease society	www.parkinsons.org.uk
MS Society	www.mssociety.org.uk
Stroke association	www.stroke.org.uk
National Society for Epilepsy	www.epilepsynse.org.uk
British Association for the study of Headache	www.bash.org.uk
Motor neurone disease association	www.mndassociation.org/
Functional and dissociative neurological symptoms	www.neurosymptoms.org

Neurosurgery at the Leeds General Infirmary

Welcome to the department of neurosurgery and your placement with us. Neurosurgery encompasses the diagnosis, assessment and surgical management of disorders of the nervous system.

Neurosurgical services in the United Kingdom are provided from regional neuroscience centres. The Department of Neurosurgery, at Leeds, provides a comprehensive neurosurgical service to the 3 million people of West and North Yorkshire.

There are 13 consultant neurosurgeons, 10 specialist registrars, 2 Senior SHOs and 8 SHOs staffing the unit. The department has approximately 60 adult beds (Ward 24 & 25); a 7-bedded dedicated Neuro-Intensive Care Unit (Ward 6) as well as a 7 bedded High Dependency Unit (Ward 7). There are 3 operating theatres, 1 dedicated to emergency surgery.

We recognise that not all will want to be Neurosurgeons in the future. However we believe that we can provide appropriate and relevant medical teaching for all pursuing a career in medicine no matter what field they wish to train in.

The adage of what you put in is what you will get out applies to your time with us. You are responsible for your own learning so make the most of it; we will try to accommodate your needs.

Mr Ian Anderson (SpR) will be responsible for your placement in Neurosurgery.

Mr Selvanathan and Mr Wilson will teach on Thursday afternoons at 2pm and Mr Anderson and Mr Sheikh on Friday mornings at 10am. Please attend ward 24 and ask the nursing staff to page them for teaching.

What does Neurosurgery involve

The list below is in no way comprehensive or exhaustive of what neurosurgery encompasses or to what pathologies you may encounter

- Cranial trauma
 - General management of the severely injured patient
 - Coma
 - Extradural haematoma
 - Subdural haematoma
- Spontaneous intracranial haemorrhage
 - Subarachnoid haemorrhage
- Hydrocephalus
 - VP shunt
- Intracranial tumours
 - Lymphoma
 - Metastasis
 - Pituitary tumours
 - Acoustic neuroma
- CNS infections
 - Infection in surgical patients
 - Meningitis
- Spinal trauma
 - Spinal shock
- Benign intradural tumours
- Malignant spinal cord compression
 - Myeloma
 - Metastasis
- Degenerative spinal disorders
 - Osteoarthritis
 - Rheumatoid arthritis
- Functional neurosurgery
 - Trigeminal neuralgia

We would expect you to see patients with some of the above conditions during your placement. It is important that you are able to take a history and perform an examination of the patient. You will then encounter some investigations and you should have some awareness of the relevance and appropriateness of these. Should you wish to attend theatre please ask Mr Anderson for a time when this can be arranged.

We hope you enjoy your time with us. We always welcome feedback about what went well and how we can improve our teaching, please let us know!

If you *are* interested in neurosurgery and want to learn more, we have some resources available to view on our website: www.leedsneurosurgery.com.