



NEUROLOGY ATTACHMENT LEARNING OUTCOMES

Aims of the attachment:

This attachment builds on learning from the year 3 Neuro attachment (please see year 3 document for full details) extending this knowledge into more practical & clinical experience. By the end of this attachment, you will have attained clinical experience of Neurology and Neurosurgery and be comfortable and competent in performing neuro history taking and clinical examination. You will be familiar with common investigations and treatments for common neurological and neurosurgical disorders. You will have experiences that illustrate the importance of holistic & person-centred care and help you to appreciate the impact of conditions for individuals with Neurological and Neurosurgical disorders & their families and carers.

Intended Learning Outcomes for the attachment:

Professional skills:

By the end of your attachment, you should be able to:

- Conduct a full neurological history, with particular focus on headache, weakness and transient loss of consciousness
- Perform a full neurological examination of the cranial nerves, upper and lower limbs
- Present clinical findings in clear & concise verbal and written form
- Formulate a differential diagnosis for a patient
- Formulate an appropriate management plan and investigations
- Explain when to seek senior help & when this should be done immediately
- Describe the circumstances where treatment escalation decisions/DNACPR is appropriate and explain the importance of documentation/communication of these
- Explain neurological and neurosurgical conditions using language that patients and relatives can easily understand
- Explain considerations involved in breaking bad news
- Describe where to find driving regulations in relation to neurological conditions and the importance of communication and documentation of this

Professional values and behaviours:

By the end of your attachment you should be able to:

- Describe the importance of reliability, punctuality and completion of tasks for patient care
- Demonstrate the importance of clear documentation of information
- Explain challenges in equality for individuals with Neurological and Neurosurgical conditions
- Explain why some individuals with neurological conditions may be vulnerable and that senior support should be sought where this is identified or there is concern about safety
- Describe uncertainties with regards to neurological diagnosis, prognosis and treatment outcomes
- Demonstrate respect, communication and support throughout the multidisciplinary team and with patients and their family/carers

Professional knowledge:

By the end of your neurology attachment, you should be able to:

Clinical Features and Assessment

- Describe the clinical features and assessment/management/prevention of:
 - Seizures, Epilepsy, Status Epilepticus and other causes of tLOC
 - Headache disorders
 - Primary including migraine, trigeminal autonomic cephalalgias
 - Secondary headache disorders – pressure dynamic headaches, cerebral venous sinus thrombosis, arterial dissection
 - thunderclap headache including diagnosis of Subarachnoid haemorrhage
- Stroke & TIA
- Multiple sclerosis
- Parkinson's disease
- Essential tremor
- Peripheral neuropathy – axonal and demyelinating & Diabetes related- and peripheral nerve palsies
- Muscle disease including muscular dystrophies
- Myasthenia Gravis
- Functional Neurological Disorder
- Motor neurone disease
- Dementia & delirium

- Wernicke's encephalopathy
- Bell's palsy
- Trigeminal neuralgia
- Neurosurgical conditions including:
 - Subdural haemorrhage/haematoma
 - Cervical spondylosis & compressive radiculopathies
 - Spinal cord compression
 - Brain abscess
 - Raised intracranial pressure
 - Brain tumours/metastases

Describe the following common or important presentations:

- Involuntary movements
- Acute and chronic pain management in relation to Neurological conditions
- Acute change or loss of vision
- Altered sensation (including numbness and tingling)
- Anosmia
- Back pain
- Behaviour and personality change
- Blackouts and faints
- Confusion
- Reduced consciousness
- Diplopia
- Disturbance of sphincter control
- Eye pain
- Facial weakness
- Falls
- Fasciculations
- Fits/seizures
- Head injury
- Headache
- Limb weakness
- Memory loss
- Neck pain/stiffness
- Neuromuscular weakness
- Ptosis
- Sleep problems
- Speech and language problems
- Swallowing problems
- Tremor
- Unsteadiness
- Vertigo

Treatment

Describe treatment strategies for common neurological and neurosurgical conditions detailed above.