



The **ROYAL COLLEGE** *of*
OPHTHALMOLOGISTS

OST Curriculum 2024

Level 4 Learning Outcomes and descriptors

Patient Management Domain

Neuro-ophthalmology (ix)

Level 4

Learning Outcome

Descriptors

An ophthalmologist achieving this level will, in addition:

Demonstrate advanced clinical management and surgical skills.

- Demonstrate competency in diagnosis, investigation and management of neuro-ophthalmic conditions, including, but not exclusively:
 - optic nerve disorders
 - chiasmal syndromes
 - post-chiasmal visual field loss
 - disorders of the ocular motor pathways (including ocular motor nerve palsies, nystagmus and supranuclear disorders of gaze)
 - abnormalities of the pupils
 - disorders of higher visual function
 - trigeminal, facial nerve, pain/headache and vascular disorders related to neuro-ophthalmology
- Manage eye and vision problems relating to brain damage (such as stroke, trauma, compressive lesions and multiple sclerosis).
- Employ a neutral density filter to enhance the interpretation of a swinging light test.
- Perform and reliably interpret examination of motility (including saccades, supranuclear, vestibular and OKN), nystagmus, pupil, ptosis, fields to confrontation, colour vision, tests of higher visual function.
- Demonstrate competency in investigating complex neuro-ophthalmology cases.
- Have an advanced understanding of neuro-imaging, electrodiagnostic tests and other investigations employed in neuro-ophthalmology.
- Demonstrate competence in the indications and performance of botulinum toxin injections to extraocular muscles for neuro-ophthalmology ocular motility disorders.
- Perform temporal artery biopsy and understand the indications, limitations, technique and risks of the procedure.
- Use ultrasonography techniques to locate the temporal artery prior to its biopsy.
- Know how to handle tissue samples to increase the diagnostic yield and liaise with laboratory staff so that the specimens are correctly identified, presented and transported.

	▪ Interpret the result of a temporal artery biopsy and make appropriate and reliable arrangements for the result to be acted upon in a timely fashion. ▪ Understand the role, indications and limitations of temporal artery duplex scanning in the diagnosis of giant cell arteritis. ▪ Have a sound understanding of the indications for, use of, and limitations of pharmacological, radiological, and surgical therapies used in the management of patients with neuro-ophthalmological disorders. ▪ Maintain a record of activities, using the RCOphth electronic logbook.
Manage the complexity and uncertainty of neuro-ophthalmology cases.	▪ Understand and apply advanced knowledge of neuro-ophthalmic disease and practice. ▪ Diagnose and manage complex neuro-ophthalmology cases including, but not limited to: - optic neuropathy related to inherited and acquired causes and compressive lesions - papilloedema - oculomotility disturbance (including myopathies, infra-/inter- and supranuclear disorders and vestibular disorders) - visual field anomalies such as: ○ functional disorders ○ neoplastic/paraneoplastic disorders ○ higher cortical visual dysfunction ○ infective, inflammatory, auto-immune, vascular/ischaemic disorders ○ neuro-ophthalmology presentations of systemic disorders ▪ Independently manage emergency neuro-ophthalmology cases. ▪ Manage neuro-ophthalmology clinics independently. ▪ Understand and utilise available instrument technology relevant to neuro-ophthalmology. ▪ Evaluate published developments in neuro-ophthalmology and modify own practice appropriately. Understand where controversies and alternative managements exist. ▪ Give specialist advice to non neuro-ophthalmology specialists. ▪ Liaise and support colleagues from other subspecialties to optimise patient care, when co-management is required. ▪ Recognise and refer patients who will benefit from more specialist input.

Apply management and team working skills appropriately, including in complex, dynamic situations.	▪ Use highly developed consultation skills efficiently to manage busy clinics whilst managing patient expectations. ▪ Ability to review and set up new methods of service delivery for efficient use of resources including virtual clinics where appropriate. ▪ Assist with decision-making where there are cognitive impairment barriers, employing Independent Mental Capacity Advocate (IMCA) services or equivalent if necessary. ▪ Understand how culture or religious beliefs can affect patients' decision-making and needs, and communicate these effectively to the team. ▪ Be sensitive to social situations and the impact these may be having on the patient, their carers and their disease. ▪ Understand when information must be shared more widely with schools, carers, police, etc. and understand the responsibilities and implications of sharing information. ▪ Receive and respond to communications in complex or challenging situations. ▪ Give specialist advice to non neuro-ophthalmologist specialists. ▪ Establish close relationships with neurology, neurosurgery, neuroradiology, endocrinology, rheumatology colleagues. Attend local multidisciplinary teams and work with other ophthalmic specialties to agree pathways of care. ▪ Liaise and support colleagues from other special interest areas, particularly medical retina, emergency ophthalmology and medical ophthalmology, to optimise patient care, when co-management is required. ▪ Promote professional values within the team. ▪ Work as a collaborative member of a team, respecting differences of opinion. ▪ Accept constructive and appropriately framed criticism. ▪ Support colleagues. ▪ Be an advocate for patients. ▪ Manage significant events and complaints, including writing formal reports. ▪ Understand and follow local policies in response to complaints.
Be an effective supervisor, teacher and trainer of neuro-ophthalmology disease.	▪ Participate in education/training of medical students/junior trainees, and allied health professionals in neuro-ophthalmology. ▪ Supervise and accredit/sign off trainees to Level 3 in neuro-ophthalmology.

The indicative time for training at this level is **12-18 months** of full-time equivalent.