

Logbook- cum- Portfolio

Elective Module: Visual Acuity Assessment and Refraction

Name of Block	Block 2
Name of Elective	Visual Acuity Assessment and Refraction
Location of hospital Lab or research facility	Eye OPD
Name of internal preceptor(s)	Dr. Priyanka Arora
Name of external preceptor (if applicable)	Nil
Learning objectives of elective	1. To obtain knowledge, observe and perform visual acuity assessment. 2. To observe and perform colour vision assessment. 3. To obtain knowledge, observe and perform visual field assessment. 4. To be able to perform refractions and prescribe glasses in various situations. 5. To evaluate a patient of diplopia and perform diplopia charting.
Number of students that can be accommodated in this elective	5
Prerequisites for elective	Basic knowledge of refractive errors. Good clinical practice.
Learning resources for students	• Parson's text book of Ophthalmology. • Refractive Errors by Khurana.
List of activities of student participation	1. Work daily with a supervisor in observing, assisting patients. 2. To document at least two activities observed/assisted.
Portfolio entries required	1. Documentation of worked up cases (min.-04)
Log book entry required	Completion of posting signed by preceptor with a "meets expectation '(M)' grade"
Assessment	Formative: • Attendance • Day-to-day participation in departmental activity • performance of assigned tasks
Other comments	-

Visual Acuity Assessment and Refraction

“Eye is a window to brain”. A lot of neurological diseases have decreased vision as one of the earliest symptom. Visual acuity testing is the most important part of comprehensive ophthalmic examination. The goal of the test is to determine the visual clarity and sharpness of vision of a patient.

One of the most common causes of poor vision is the presence of refractive errors in the eye which can be corrected by prescribing proper spectacles. There are different methods to evaluate visual acuity in different age groups. Also, near vision and colour vision assessment includes separate test methods.

There are many reasons that an individual could have an altered visual acuity. One of the most common causes of altered vision is a refractive error, such as myopia (nearsightedness) and hyperopia (farsightedness). Additional causes of visual impairment include astigmatism, amblyopia, retinal detachment, macular degeneration, ischemia, cataracts, glaucoma, corneal abrasion, or other traumatic injuries. Visual acuity testing is essential as many of these factors can be benefited from early intervention.

Visual acuity testing should be performed as part of a comprehensive eye exam, such instances include:

- Screening for visual impairments
- Aid in diagnosis of refractory eye disease
- Evaluation of acute changes in vision, traumatic or nontraumatic
- Reevaluate vision after corrective procedure or intervention
- Monitor vision for certification where it is necessary such as driver's license renewal

A refraction test is usually given as a part of a routine eye examination. Refraction testing allows us to know the refractive state of the eye and prescribe spectacles to improve vision.

As a part of this elective, student will be exposed to various methods of assessing visual acuity for distance and near in different age groups. Also, the students will be trained to prescribe glasses for simple refractive errors like myopia, hypermetropia and presbyopia.