

STANDARDIZED CLINICAL PROTOCOLS

OPD and Refraction Protocols



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STANDARDIZED PROTOCOLS FOR OUTPATIENT EXAMINATION

Guidelines for case-sheet writing

1. The examining doctor should clearly indicate his name on the upper right hand corner of the case sheet.
2. The first page of the case sheet is only for oblique light (Torch light) examination findings. The 2nd page deals with vision, refraction, IOP and the undilated fundus examination. The 3rd and subsequent pages should be used for S/L and dilated fundus examination details, a provisional diagnosis, treatment and follow up plan.
3. For a new patient all findings are to be documented, whether normal or abnormal. Subsequently during review only relevant positive details may be noted.
4. All additional forms & the case sheet should contain the patient's name, MRN No. etc. filled in by the doctor or the nurse.
5. Appropriate additional sheets should be used.
 - With a speciality file, thinner, larger additional sheet should be used.
 - With general OPD card, thicker smaller sheets should be used
6. The left half of the case sheet should be used for writing the clinical findings and the right half for writing the treatment details.
7. The diagnosis column must be filled up in the case sheet as well as in the coding sheet.

History Taking

History should be taken with care and attention and the following points should be attended to in chronological order, although the exact composition will necessarily vary with the patients' particular problem and needs.

1. Present History in detail
2. History of ongoing treatment; Patients with Chronic ocular problems are very often on medication when they present here for the first time. As it is very important to specify which medication needs to be continued or discarded in the final evaluation, it



is necessary to get the details. Other wise patients continue to use multiple formulations of steroids / vitamin etc.,

3. History of previous treatment: This must be evaluated for both ocular and systemic problems in detail. Similarly for a chronic ocular problem such as uveitis it is necessary to document duration and the nature of steroid therapy. The nature of steroids given such as , oral etc, and the presence or absence of response to the type of therapy will help formulate an idea about the intensity of therapy required.
4. History of allergies
5. History of previous surgeries and injuries, if present. - year of surgery and visual outcome must be documented.
6. History of systemic diseases like diabetes, hypertension, asthma etc., Make a note of the duration and treatment details.
7. Family history should be elicited in hereditary conditions like glaucoma, R.P, etc., and also in congenital disorders.

Note:

1. If you are not able to follow the language, you can get the help of nursing staff for translation.
2. If the patient is not clear about his symptoms the doctor can put leading questions and should try to search for the exact reason for seeking consultation.
3. Doctors should take care about the primary complaint that is given by the patient. Patients will not appreciate or be convinced about our clinical skill to manage complicated problems, if the doctor has not answered a question about watering and photophobia.
4. Don't blame the patients for his delayed consultation.
5. Never find fault with any surgery performed by other doctors, especially the referring doctors.
6. Always be courteous to the patient, answer all question politely and to the point
7. If a patient appears to be unsatisfied, offer him the choice of seeing another doctor within the hospital premises
8. Written reply should be given if the patient is referred.



Vision

1. All new & review patients are checked for preliminary vision once they enter the hospital.
2. Doctors should check the entry of preliminary vision for all cases of injury and medico legal cases. (especially when seen during non OPD hours). If in doubt the medical officer should do it personally, for all trauma patients visual acuity/RR are of utmost importance.
3. If a patient is being seen within a period of 3 months corrected vision is sufficient and it is unnecessary to repeat refraction.
4. Visual acuity with PG must be obtained at all visits.

Slit lamp Bio microscopy

Examination with slit lamp is preferable for all cases and compulsory for

1. Patients with cataract and complicated cataracts (dilated)
2. Corneal problems
3. Intraocular inflammation
4. Injury
5. Postoperative cases
6. Suspected shallow AC
7. Patients with congested eye
8. C\O Chronic Irritation, Photophobia, Burning sensation

Tonometric Examination

Examination of IOP is necessary

1. For all patients above 40 years
2. Patients with large cup irrespective of age
3. Patients with asymmetrical cupping
4. Glaucoma suspects/family history of Glaucoma
5. Uveitis cases



6. All patients posted for intraocular surgery
7. Known glaucoma patient
8. Patients on long term use of steroids

Tonometry should be avoided in patients with

1. Conjunctivitis
2. Corneal ulcer
3. Penetrating injuries
4. Very uncooperative patients

Applanation tonometry is preferred in

1. Myopic patients
2. All post operative cases whenever necessary

Duct Examination

1. Duct examination has to be done for
 - a. Patients C\O watering
 - b. Patients under going intraocular surgeries
 - c. Patients with corneal ulcer
2. Duct examination is contraindicated in-patients with acute dacryocystitis and perforated globe.
3. Duct examination should not be repeated at every visit.
4. Partially free and not free (clear fluids) ducts should be taken up for conjunctival cultures before surgery.

Dilatation for fundus examination

1. Dilatation is a must for all patients visiting for the first time.
2. Patients above 40 years, dilatation can be done with 5% tropicamide plus. If they are hypertensive, plain tropicamide should be used.



3. Pupillary dilation should not be advised initially when we find disc pallor, glaucomatous cupping of disc or in any other conditions with RAPD, where field charting and colour vision testing will be required.
4. Cases with shallow anterior chamber pupils should not be dilated unless the medical officer sees the patients and also in cases of squint and when contact lens work up has to be done
5. Check muscle balance for young patients with headache, eyestrain before dilatation.
6. All patients should be dilated for fundus examination before posting for cataract surgery. This will also help to decide about phaco in patients with mature cataract.
7. Dilation may be avoided in patients with external ocular infections.

Urine Sugar

Examination of urine is a must for all patients above the age of 40 and

1. Patients posted for intraocular surgery
2. Patients who are on oral steroids
3. Patients with iridocyclitis
4. Patients with past history of diabetes and also with family history.
5. Patients whose fundus shows vascular changes.
6. Patients with recurrent stye, chalazion etc.,
7. Patients who have renal problems.

Blood pressure

Examination of BP is a must for all patients above the age of 40 and

1. Patients posted for intraocular surgery
2. Patients who are on oral steroids & those who need oral steroids.
3. Patients with past history of Hypertension and also with family history .
4. Patients whose fundus shows vascular changes.
5. Patients who have renal problems and chronic headache.



Final / Counselling :

1. When the medical officer sees the patient at the end, the patient has already been attended to by a few people. Before dispensing glasses, prescribing medication etc, it is important to quickly review the case sheet and examine the patient to ensure that no vital detail is missed.
2. He must confirm all findings in the case sheet fully and that there are no unexplained or unevaluated findings. If need be the entire history and clinical examination may be repeated.
3. Counselling is possible only if the doctor reviews the case sheet. It is important to clearly and concisely explain to the patient the nature of his condition, what we can do for him, and also what we cannot do for him. For e.g. In hereditary macular conditions, medications are presented, but it is important and explain the prognosis and refer to LVA.
4. In patients with hereditary disorders like RP and glaucoma counselling is very important. Affected parents should be aware that their children are at risk. Similarly glaucoma patients should have their family members examined at the earliest possible.
5. All reference letters must be answered with a copy of the reply being placed in the case sheet.
6. When the patients need referral to another hospital, the same must be explained to the patient and necessary guidance should be given to the patient.



STANDARDIZATION OF REFRACTION PROTOCOLS

The following steps in refraction are carried out for all patients

1. Note present complaints of the patient with Present Glasses (PG)
2. Check preliminary vision with/without glasses separately for each eye
3. Note the power, IPD and segment of PG (if complaints)
4. Carryout dynamic refraction
5. Do subjective verification of refractive errors; Jackson's cross cylinder whenever necessary
6. If there is no improvement in vision use pinhole to check for any improvement
7. Go for 0.25 diopters of subjective accuracy
8. If the patient complains of distorted vision do a Amsler Grid evaluation
9. Avoid over correction in Myopia (Duochrome test)
10. Check near vision separately for each eye
11. Give correction for near vision according to patient's working distance (occupation)
12. Check binocular vision with present correction
13. Compare present correction with PG and note the patients response in the case sheet and advise accordingly
14. Note down IPD

Cycloplegic Refraction

The following cases are chosen for cycloplegic refraction. (1% Cyclopentolate)

1. All patients below the age of 10 years (0.5% Cyclopentolate < 1 year)
2. All cases of suspected accommodative spasm
3. Presence of squint (below 30 yrs)
4. Patients below the age of 30 years with Manifest hypermetropia.
5. Gross difference between PG and Dynamic refraction
6. Symptomatic patients with or without glasses
7. No improvement in dynamic refraction with apparently normal eye.



8. Extremely un cooperative patients for retinoscopy to attain nearest possible correction
9. Counsel the parents regarding the possible transient change of behavior following application of Cyclopentolate
10. Indication for Atropinization: All children with squint, all children below 5 years with refractive errors

Dosage for Atropine – 1% Atropine ointment twice daily for 3 days and to report for refraction on the 4th day.

Counsel the parents regarding the amount of Atropine to be applied, and the side effects

Post Mydriatic Test (PMT)

The following criteria are adopted for PMT

1. Only when dynamic and cycloplegic refraction show difference of more than 0.5 D and difference in axis.
2. Date for PMT varies according to cycloplegic/mydriatic used:
 - Atropine – after 2 weeks.
 - HA (2%), cyclopent - after 48 to 72 hours
 - Tropicamide – after 1 day
 - PMT patients should be seen as early as possible.

Guidelines for Prescription of Glasses

1. If the patient has come for presbyopic glasses, prescription is given after dynamic refraction but fundus should be examined after dilatation.
2. If the patient is not educated and if he is not interested in near vision correction, doctor has to avoid giving bifocals.
3. Always ask the occupation of the patient before giving NV correction. Weaver and computer operators may need NV correction at 50 cm. so he needs under corrected near vision glasses. A watch repairer or diamond cutter may need near vision at 20-30 cm, so that he needs extra power in his near vision glasses.



4. If the aphakic patient has high cylinder correction it is better to give two separate glasses for reading and distance correction.
5. Always check previous glasses power and patient's complaints about previous glasses. This will avoid possible discomforts in the new prescription.
6. Glasses prescription should be written clearly with IPD measurement and details about the tint and bifocal segments. It should have doctors signature, date and M.R. number. If the prescription is wrong it will be the institutions responsibility to replace the wrong glass.
7. Ask the patient for symptoms of eye strain if there is a gross difference in refraction between the two eyes or in the axis of the cylinder.
8. Avoid over correction in myopia.
9. Don't give full correction in high astigmatism.
10. Presbyopic correction should be prescribed in myopia if accepted/needed by the patient.
11. Type of frame and material of lens can be suggested in special cases.

Check list for trouble shooting

1. Patients' complaints specific to spectacle wearing.
2. Check IPD with pupillometer.
3. Check the base curve.
4. Check the frame pantoscopic tilt, Nose pad etc.
5. Check the correctness of RE and LE glass.
6. Check the lens power with focimeter.
7. Recheck the refraction if necessary.
8. Explain how to use progressive lenses.
9. Co-ordinate with optical shop if a change is required.
10. Feed back from the customer if he is happy with glasses.

