Dr. Vithalrao Vikhe Patil Foundation's

Medical College & Hospital

Ahmednagar

SOP For

Department of Ophthalmology

DVVPF's Medical College & Hospital Ahmednagar
Department of Ophthalmology

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TABLE OF CONTENT

1. QUALITY POLICY OF DR.VIKHE PATIL MEMORIAL HOSPITAL & MEDICAL COLLEGE AHMEDNAGAR.

We at Dr.Vikhe Patil Memorial Hospital & Medical College Ahmednagar
Quality education through institutions in diverse disciplines that have dedicated faculty, state-of art infrastructure and are capable of developing competent professionals of global standards with a deep sense of commitment towards human values,

We shall strive to exceed the satisfaction of our students, college and society at large.

To rcalize this, the vidyapeeth authorities shall regularly monitor and review its performance for continual improvement with social emphasis on advanced curriculum, research methodologies and enhancing the competencies of teaching and non-teaching staff.

1. INTRODUCTION

The department of Ophthalmology at Dr.Vikhe Patil Memorial Hospital & Medical College Ahmednagar has been conducting Post Graduate Degree as well as the Diploma in Ophthalmology programs since 2013

2. MISSION

- To provide highest quality ophthalmic care.
- To conduct high impact research generation new innovative technology.
- Conduct continuing education programmes and activities to keep up with the changing trends in the field.
- To create awareness about eye donation in the society by conducting various programs.
- To create awareness about glaucoma in the society.
- To provide such knowledge and skills to the postgraduate students that shall enable him to practice as a clinician, as a primary health care physician and surgeon.
- To train the undergraduates in the basics of ophthalmic procedures.
- To Function effectively to assist in the implementation of National Program for the prevention of blindness and rehabilitation of the visually impaired

3. QUALITY INDICATORS OF THE DEPARTMENT

- Time for preoperative workup and investigation with anaesthetic fitness should be 5 days
- Time between surgery and discharge should not be more than 2-3 days
- 100% patients of glaucoma should be assessed with all glaucoma tests
- 100% of patients referred with diabetic retinopathy should be evaluated and treated if required

4. DEPARTMENTAL SCOPE OF SERVICE

1. Services in OPD

- OPD services between 9.00 am to 5.00 pm (Monday-Friday) Saturday 9.00 am to 1.00 pm
- OPD in carried out by dedicated and competent faculty.
- Provide service for all eye disease.
- Comprehensive services including assessment of vision prescriptions of glasses and preliminary examination. After final examination and diagnosis if necessary, patient in guided to specialty clinic.
-

- Specialty clinics are held for glaucoma, Retina, Squint and Cornea, Contact lens and Cornea, Contact lens and Oculoplasty on specific days.
- OPD is will equipped with automated chair units, Vision box, refraction box, slit lamp Specialty OPD's are well equipped with Humphrey field analyzer- Non contact tonometry Fundus camera, optical coherence tomography and Nd Yag laser
- 24 hours emergency ophthalmic services are available

DAYS	TIMING	PROGRAMME
Monday	10 00 am-4.00 pm	Retina clinic
Tuesday	10 00 am-4.00 pm	Glaucoma
Wednesday	10 00 am-4.00 pm	Cornea & Keratoplasty
Thursday	10 00 am-4.00 pm	Oculoplasty & Squint
Friday	10 00 am-4.00 pm	Retina Clinic
Saturday	10 00 am-1.00 pm	Refraction

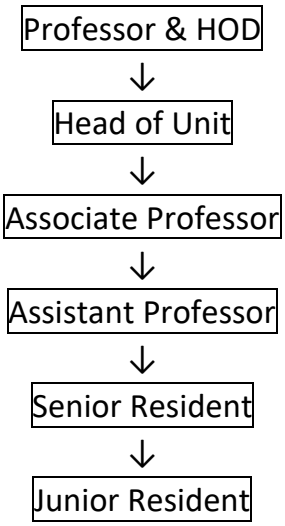
2. **Services provide to IPD patients:**
   - Patients are admitted through OPD after proper examination carried itself by PG residents and faculty Incharge
   - Admitted patients get made on basis of patients requiring surgery, IV drugs or for any observation.
   - Admitted patients get IPD files made & beds are allotted by sister incharge.
   - Preoperative procedure like IOP, sac syringing, A-scan, B scan specular microscopy is done.
   - All IPD patients undergo general investigation before the Anaesthetic checkup.
   - Total beds-30
   - Eye banking & corneal transplant services are given.
3. **Services provides in OT**
   - OT is carried out on all 6 days/week.
   - 2 OT rooms, one for major ophthalmic surgical procedures & other is for septic procedure is available.
   - Fully equipped OT with microscopes, hydraulic tables, TV monitors, Phaco machines & Vitrectomy machine.

4. **Outreach activities**
   - Regular camps are conducted at peripheral areas of Ahmednagar.

5. Research Facilities

- Fundus Fluorescein Angiography
- Automated Perimetry
- Laser Photocoagulation
- Nd. YAG laser Capsulotomy
- Operating Microscope
- Phacoemulsification Machine
- Slit Lamp
- Perkins hand held tonometer
- Vitrectomy machine
- OCT
- Noncontact tonometer

6. ORAGANOGRAM OF THE DEPARTMENT



7. JOB DESCRIPTION OF THE DEPARTMETN

1. Responsibilities and duties of HOD of Ophthalmology:

- Distribution of duties and responsibilities Administrative, Academics, Clinical and outreach.
- To maintain discipline, Regularity and punctuality by maintaining muster roll movement registers etc.
- Prepare annual budget for the department.
- Monitor academic and clinical performance of staff from time to time and encourage them to improve and update themselves so as to achieve excellence.
- To Organize, distribute, monitor, punctuate and also perform academic activities like conducting Graduate and Post-Graduate teaching & Training activities as per schedule in collaboration with Head of the Unit (HOU), bed side clinical teaching, conducting Tutorials, periodic tests and examinations
- To work as postgraduate guide for PG students, allot teachers and dissertation subjects to the PG student allotted to him/her, To facilitate and periodically assess his/her work and see that the desired targets are achieved in time.
- Conduct and encourage postdoctoral research, Encourage Students to participate in conference, extracurricular activities, at College, University & higher levels.
- Guiding & helping faculty to develop teaching Skill by allotting theory classes and clinical teaching under supervision of Seniors
- Identifying weak areas of faculty in teaching learning research, clinical skills etc. And overcoming the problems by suitable counseling and guidance
- Ensuring availability of optimal facilities so as to achieve and improvise clinical skills.
- Monitoring performance (Academic & Clinical) of faculty & apprising them about the areas that need improvement. Helping and guiding them bring about desired change.
- To work on college council and other Committees (academic, Clinical administrative)
- To organize guest lectures, live workshops by renowned professional and also participates in such activities in other institutions.
- Perform duties to sure continuous improvement in quality of services to the patients through effective service delivery system.
- To maintain medical records, investigation reports of patients under her/his care in a legible and responsible manner.
- To suggest techniques and methods of management in order to upgrade quality of patient care.
- To supervise work of his unit residents. Comprehensive Management of the units in the department so that the patients get proper treatment and advice and there is no

- Medical negligence as a result violation/infringement or breach of code of medical Ethics. Page no 9
- To decide a policy and procedure on prevention of outbreaks of hospital acquired infection, Biomedical waste management, Biosafety measures, barrier nursing Isolation protocols and train his department staff resident doctors and students on these issues.
- To ensure proper communication with other department
- To carry out periodic stock verification.
- To ensure that all the OPD and OT equipment and instruments are regularly
- Maintained and kept serviceable at all the times.

2. **Responsibilities of Professor**
    - To actively participate in both the administrative & Professional departmental activities.
    - Be prepared to take the responsibility of the HOD in his absence
    - To work as postgraduate guide for PG students, allot dissertation subjects to the PG student allotted to him/her. To facilitate and periodically assess his/her work and see that the desired targets are achieved in time.
    - To supervise work of his unit residents, Comprehensive Management of the units in the department so that the patients get proper treatment
    - Conduct a research, Encourage students to participate in conference, extracurricular activities, at College University & higher levels.
3. **Responsibility of Associate Professor**
    - Perform duties to ensure continuous improvement in quality of services to the patients through effective services delivery system
    - To maintain medical records, investigation reports of patients under his care in a legible and responsible manner.
    - To supervise work of their unit resident.
    - Conduct graduate and postgraduate teaching and training activities
    - Conducting periodic tests and examination.
    - To work as Postgraduate guide for PG students and guide them
    - Conduct and encourage Postdoctoral research
    - To suggest technique and methods of management to improve the quality of patient care.
4. **Responsibility of Assistant Professor**
    - To assist in the smooth conduct of clinical work, supervision of the seniors.
    - To assist in department office work
    - To teach various surgical techniques to juniors
    - Conduct a research
    - Conduct graduate and Postgraduate teaching as per schedule in collaboration with HOU
5. **Responsibility of Senior Resident**
    - To assist in clinical work in OPD and ward under supervision of the seniors
    - To Participate in bed side clinical teaching
    - Conduct Tutorials and Periodic tests
    - To adapt new surgical techniques under the guidance of seniors.
    - To supervise work of his unit residents.

6. **Responsibilities of resident**
    - To work for their dissertation under the guidance of their teacher
    - Attend all teaching activities
    - Maintain their log books and obtain signature of their teachers
    - Participate in conferences and workshops
    - To perform duties to ensure improvement in quality of services to patients
7. **Responsibilities and duties of operating Theatre Assistant**
    - The main responsibility of an OT Assistant is to maintain a sterile environment for the patient and surgical team before, during and after surgery.
    - Before surgery, an assistant prepares the OR by washing and sterilizing all the surgical instruments and equipment using special chemical germicides and disinfectants.
    - The assistant helps the surgical team member in scrubbing and donning gowns. Gloves and masks.
    - During surgery, they may assist in providing extras required and prepare specimens for sending to laboratory.
    - After Surgery. They help in transport of patient to recovery room and clean the OR for the next procedure.

8. CREDENTIAL AND PRIVILEGES

Sr.no.	Designation	Qualification/Credentials	Clinical Privileges	Role and responsibility
1.	**Professor & HOD**	**Qualifications: MS Experience** As laid down by MCI standards Skills: Should possess managerial & leadership skills, Should have teaching experience/capabilities.		To ensure smooth functioning of the department in accordance with the laid down guidelines, protocols & SOPs & by liaising between the administrative and nursing staff
2.	**Professors**	**Qualifications: MS Experience:** As laid down by MCI Skills: well conversant with latest advances in the Specialty		To actively participate in both the administrative & professional departmental activities and be prepared to take the responsibility of the HOD in his absence
3.	**Associate Professors**	**Qualifications: MS Experience:** As laid down by MCI **Skills**: Well conversant with latest advances in the specialty.		To carry out the tasks assigned to them in a smooth and professional manner
4.	**Assistant Professor**	**Qualifications: MS Experience:** As laid down by MCI		To Assist in the smooth conduct of clinical work,

		Skills: Good Knowledge of the subject & adept at basics skills		under supervision of the seniors.
5.	**Senior resident**	**Qualifications: MS Experience:** As laid down by MCI **Skills**: Good Knowledge of the subject & adept at basics skills	• Individual cataract surgery without supervision • Other surgeries under supervision like oculoplasty and Keratoplasty	To Assist in the smooth conduct of clinical work, under supervision of the seniors.
6.	**Junior Resident-3**	**Qualifications: MBBS Experience 2 year residency**	• Cataract surgery under supervision • Nd YAG peripheral iridectomy Procedure under supervision • B Scan under supervision • Procedures like FFA OCT, Nd YAG Capsulotomy under supervision	
7.	**Junior Resident-2**	**Qualifications: MBBS Experience: 1 year residency**	• Pterygium surgery under supervision • Steps in cataract surgery under supervision • Indirect Ophthalmoscopy	
8.	**Junior Resident-1**	**Qualifications: MBBS**	• Peribulbar block • Procedure of Applanation tonometry under supervision • Sac syringing	

9. VISION TESTING

Vision Testing

Dos

- Distance between the chart and observer should be 6m
- Observer should sit straight and look forward
- Each eye should be tested separately
- Near vision to be given at reading distance
- Prescription should provide most comfortable and sharpest vision
- Myopia should be under-corrected and Hypermetropia should be exactly corrected

DONTs

- It should not be performed in dark surroundings
- It should not be performed when pupils are dilated
- Spectacle prescription should not be given in case of uncontrolled blood sugar.

10. GOLDMANN APPLANATION TONOMETRY

Dos

- Prisms should be disinfected, rinsed in sterile water and wiped dry
- Graduation marked 0 on measuring prism should be aligned with white market point on tonometer head
- Calibrated end of tonometer should be sct at 10 mm/Hg
- Patients head and chin should be incontact with forehead and chin rests and lateral canthi should be aligned with the line on slit lamp frame
- Calibration should be done every 6 months

DONTs:

- Probe should not be left in hydrogen peroxide for more than 10 minutes
- It should not done in patients with active infection, recurrent corneal erosion and incompletely hcaled corneal abrasions
- Excessive amount of fluoroscein should not be used
- Pressure should not be applied on the globe

11.OT PROCEDURE PROTOCOL

PROCEDURE

PRE OPERATIVE MEASURES

- Mandatory Investigations: Blood & Urine sugar
- Random blood sugar Should be < 200 mg/D1
- Urine sugar if performed must be nil
- If positive, surgery to be done only after blood sugar results
- Blood Pressure
- Adequately controlled should be < 150/90 mm Hg

OCULAR EXAMINATION

- No Syringing
- If regurgitation is '+ve' - NO Surgery
- If infection of lids, Adnexa & Surroundings-No Surgery to be done
- If infection of Lids, Adnexa & Surrounding-No Surgery to be done
- PREOPERATIVE TOPICAL ANTIBIOTICS
- One day prior to surgery:3-4 times a day
- Broad spectrum antibiotic drops to be used

PHYSICIAN REFERENCE

- For known systemic Diseased
- Check for cardiac, Neurologic, Renal, Respiratory, HIV, Endocrine & Hepatic disease
- Fitness from a Physician (with PG degree)

IN MASS SURGERIES

- Fitness from a Physician (PG degree)
- Patients with multiple systemic problems- Surgery Not to be done
- Combined surgery-Not to be done
- High risk cases & topical surgeries to be done only by experienced surgeons with all due precautions

OPERATIVE MEASURES

GENERAL

- Anacsthetist/Pulse Oximeter Desirable (Not a must)
- Emergency Drugs-Mandatory
- Microscope Must
- Magnifying Glasses NOT to be used for surgeries

- Written informed consent in patient's language explaining the risks involved and benefits expected

SURGEON

- Sterilized Gloves for every case
- Gown-for maximum of 5 cases
- Surgeon should not come out of OT in OT gown
- Mask should cover nose properly
- OT Cap-to be worn properly-tucking in all hair
- Position of Hands after scrubbing & Gloving-above waist & upright in front
- Shoe Covers are Not to be used
- Separate washable rubber OT slippers different color coding
- Separate bathroom slippers
- Doctors/Staff with URTI/ Skin infection or any other obvious infection should not be allowed to enter the OT
- Gowning/Hand Washing/Gloving as per standard protocol for all OT personnel
- With betadine/Chlorhexidine
- Running Tap Water
- Boiled-Cooled water
- Clean, Washed OT dress
- No street clothes inside OT for staff
- OT etiquette to be put on walls
- Important Do's and Don'ts on the wall
- No contact procedures like (Biometry/Tonometry) on day of surgery
- Document sequence of surgeries
- Prefer SICS for mass Surgeries
- Do not perform more than 25 cases/surgeon/day 8 hours

IRRIGATING FLUIDS

- Note the Batch Number
- Use Glass/Plastic Bottle
- If Glass bottle-do Vacuum test (Bubbles on putting drip sct)
- Physical inspection against light
- Preferably-one bottle for one patient

- No double autoclaving
- Preferably keep infusion bottle for 24 hours after use
- Microbiological work up and approval for each batch, where ever feasible
- Ringer lactate, BSS equally effective (Although BSS preferable)
- Antibiotic in Irrigating solution-not essential

WOUND SECURITY

- When in doubt-sutures to be applied
- Phaco-Tips and sleeve to be changed for each case
- Tubing to be primed

STERILITY OF PATIENTS

- Bath/Facial wash with soap and water before surgery
- Cancel surgery when there is unusual congestion or discharge
- Speculum must
- Disposable Adhesive drape to isolate lashes to be used
- Patients to wear clean, washed OT dress with cap & gown (No street clothes)
- On skin and periorbital area
- Boundary-hairline tip of nose,nasolabial fold & ear
- In the conjunctivalsac for l minute

AT THE END OF SURGERY

- Sub Conjunctival antibiotic-Steriod-in the inferior fornix
- If no sub conjunctival (Topical anaesthesia) Topical application of B-S antibiotic

POST SURGERY CARE

- Patch preferable for at least 6 hours- avoid rubbing
- Follow up on 1^{st} ,3^{rd} 7^{th} & 28^{th} days
- With visual acuity with pin hole
- Slit lamp examination Preferable
- Look for Media opacity with direct Ophthalmoscope
- Protective glasses/eye shade for 1 week
- Oral antibiotics only in high risk cases
- Topical antibiotics with steroids for minimum of 4 weeks
- Personal hygiene to be emphasized
- Short acting cycloplegic at the discretion of surgeon
- Surgeon /Assistant to be available

12. WHAT TO DO IN CASE OF INFECTION

PROCEDURE: PROTOCOL

- Dialogue with Patients and Relatives
- Explain: Mechanics of Infection
  - . It is still treatable
  - . Need for cooperation & referral
- Document all factors
- Review all sterility factors
- Have peer Review Refer to higher center
- Treat Energetically with Intravitreal Antibiotics and supportive therapy
- Seal & take cultures from OT
- Note batch numbers of all solutions used and send samples for culture
- Seal and keep all solutions used in safe custody

13. IN CLUSTER INFECTION OR OUTBREAK

PROCEDURE:

1.1 A cluster infection is defined as the occurrence of two or more than two infections at a time, or the occurrence of repeated postoperative infection

1.2 Inform authorities (CMO, MS, Senior Authority)

1.3 Institute infection control committees

1.4 Inform AIOS & Seek help

1.5 Engage & Seek help of lawyer

1.6 Handle Press carefully (Prevent pandemonium from spreading)

1.7 Let Hospital committee handle Press

Do not panic; treat early learn to give intravitreal antibiotics with 30 g needle

14.CATARACT

PROCEDURE: EVALUATION AND EXAMINATION

History; Following points pertaining to the presenting complaints will be obtained

- Detailed history pertaining to duration and progression of vision loss, glare contrast sensitivity, coloured halos, flashes of light, dark spots in the field of vision, polyopia, redness, watering and itching will be obtained.
- Past history of any previous ocular diseases, ocular surgery and outcome of the surgery and ocular trauma will be obtained.
- History of systemic diseases like hypertension, diabetes, bleeding disorders, cardiovascular, respiratory disorders and cutaneous disorders will be obtained.
- History of any known drug reaction or present intake of drugs like aspirin, warfarin, tamsulosin, xylocaine, immune suppressants and steroid will be taken.

EXAMINATION

General Physical Examination

- Puls (rate, rhythm,Volume, arrhythmia, synchronicity)
- B.P
- Respiratory rate
- Pallor, icterus, lymphadenopathy, clubbing, JVP, Cyanosis and pedal edema.

Systemic examination

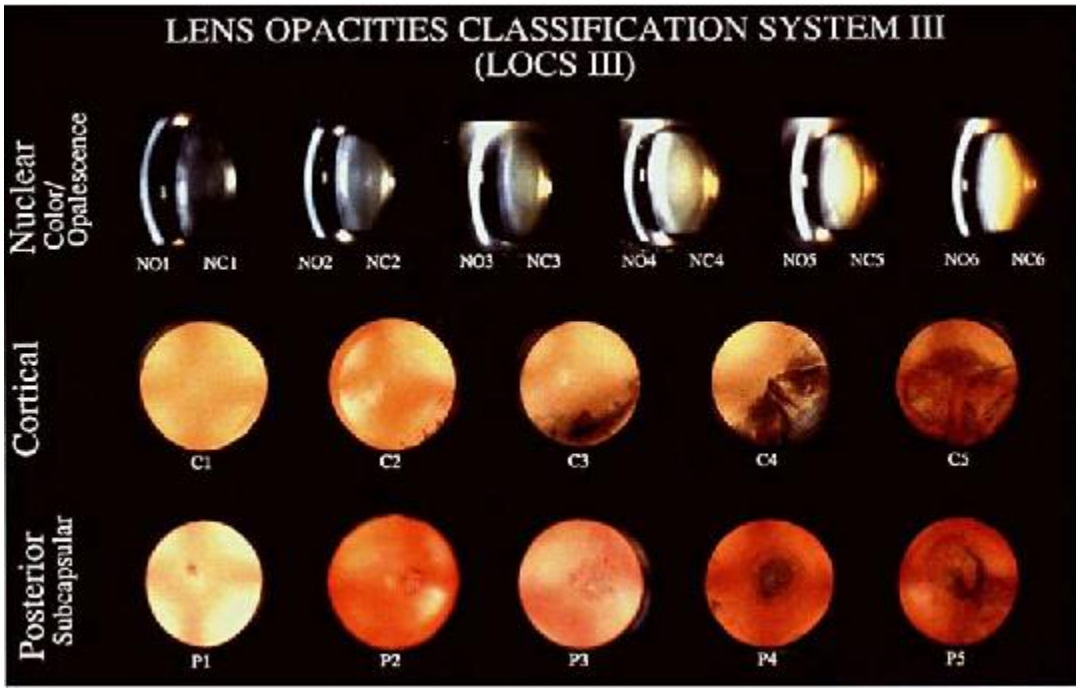
- **Detailed systemic examination will be done with special emphasis on Cardiovascular system, respiratory system and focus of infection in the body will be identified and documented**

Ocular examination

- Visual acuity assessment (including Perception of light andprojection of rays)
- Visual axis (cover/uncover test)
- Lids, Lacrimal sac area (swelling, tenderness, regurgitation test)

- Pupillary responses (Direct reflex, Consensual reflex, RAPD and dilatation response)
- Ocular Movements (Ductions and Versions)
  Refraction/BCVA
- Sac syringing
- Slit-lamp examination will be done to look for

  - Corneal (any Opacities)
  - Anterior chamber (for depth, angle with van herrick's Grading and contents)
  - Iris (for synechiae, Pigmentation,atrophy, vascularization)
  - Pupil (shape, pupillary margin, Pseudoexfoliation)
  - Response to mydriasis and any sign of uveal inflammation in the anterior segment will be looked for
  - Crystalline Lens (Integrity of the zonules, Subluxation and dislocation of the lens of both eyes will be looked for and type of cataract will be documented)



Fundus evaluation of both eyes (if possible)
B-SCAN Ultrasonography (in case of opaque media)

Preoperative measurements

- FBS
- BP
- ECG
- Medical fitness/PAC will performed on all patients.

Biometry

SRK-T formula will be used to determine the power of IOL and we will aim for emmetropia in all patients.

Post-operative care

- Tab vitamin C 500 mg BD
- Antibiotics TB Ciprofloxacin 200 mg BD X 5 days
- Dressing removed on day one.
- Topical steroid 1 hourly X 7 days.
- Topical Antibiotic 4 hourly X 1 week.
- Topical Antibiotics will be discontinued after 3 weeks and steroids will be given in tapering doses for 4-6 weeks
- Mydriatics E/D :- T-plus HS for one week.
- Treatment may be altered depending on the clinical response.

Follow up:

- Patients will be examined one day after surgery for visual acuity, cornea, anterior chamber contents, incision site and lens.
- All Patients will be planned after 7 days or earlier depending upon the condition of the patients.
- Final refraction will be given at 1 month.

15. DCR SURGERY:

Preoperative workup

DOs

- Blood pressure control should be done to decrease risk of bleeding
- ENT evaluation should be done to rule out atrophic rhinitis etc

- Blood thinners and anticoagulants should be withheld after consultation with physician to further decrease bleeding
- Ethamsylate 250 mg bd should be given one day prior to surgery for hemostasis
- Nasal decongestant drops should be instilled twice a day
- Patient should be kept nil by mouth for ease of sedation
- Standby anesthesiologist should be available to provide sedation and deal with systemic complications.

DONTs

- Do not Operate on pts with recent history of stroke or myocardial infarction
- Do not operate of patients with epiphora due to other Causes like lacrimal point stenosis.

<u>Postoperative management</u>

Dos:

- Head end should be elevated at 45 degrees at all times to decrease risk of hemorrhage
- Ice/cold compresses should be placed on incision site for 48 hours to decrease swelling and bruising
- Dressing and nasal pack removal should be done after 24 hours
- Otrivin-p nasal drops, chloramphenicol ointment on the wound site and antibiotic with steroid drops should be instilled.
- Oral antibiotics and NSAIDs should be given for 5 days
- Gentle sac syringing to remove blood clots should be done once every 3 days 3 for 1 week
- PT should rest for I week post discharge
- Nonabsorbable skin sutures should be removed I week post operatively

DONTs

- **Heavy Lifting exercise, strenuous activity should not be done to avoid bleeding**
- **Hot drinks should not be taken in first 12-24 hours post-surgery to decrease risk of epistaxis due to heat induced nasal vasodilation**
- **Excessive nasal blowing should not be done**

16.CORNEAL SCRAPING

Purpose of SOP: To instruct Ophthalmologist, technician as well as Patients undergoing corneal scraping about its correct methodology.

Scope: All the patients who are candidate for corneal scraping, including patients with bacterial, fungal, viral keratitis.

Responsibility: The Ophthalmologist and the technician are responsible for safe corneal scraping without damaging the rest of the cornea. Patients should be explained the due risk of the procedure and its benefits.

Procedure:

- Use a different needle to take each specimen, or if using a scalpel, flame it between each use.
- Use at least one liquid phase medium (Preferably BHI) for inoculation.
- Clearly explain the procedure to the patient before performing it.
- Instill a local anaesthetic agent in the affected eye to reduce discomfort.
- Correctly and clearly label all specimens before sending them to the laboratory.
- Do not scrape extremely thinned out corneas with undue force, to avoid descematocoele formation.
- Do not refrigerate the specimen and store it at room temperature if transport to the laboratory is not possible immediately

17.PRE- AND POST- OPERATIVE CARE IN INJ. AVASTIN GIVEN INTRAVITRELLY

Purpose of SOP: Protocol to be followed before and after giving inj. avastin intravitreally.

Scope: All the patients who are for intra vitreal inj. Avastin

Responsibility: Vitreo-retinal surgeon is responsible for the safe injection of Avastin under sterile conditions. Patients should be explained the due risks of the procedure and the pre-and post- Operative care to be taken.

Definitions: and abbreviation:

Guidelines for pre-and post-operative care for inj.Avastin intra-vitreally

Pre-operatively

- Ensure authenticity of the injection vial and proper cold chain storage.
- Screen patients to ensure patent NLD and absence of ocular infections, in order to prevent Endophthalmitis and other post-op complications.

- Ensure control of systemic illnesses like diabetes and hypertension before performing the procedure.
- Ensure proper written informed consent, taking care of including its off label use.
- Do not give injections intra-vitreally in an office setting, ensure sterile environment.
- Do not give inj.Avastin to patients with active ocular infections.
- Do not talk while giving inj.Avastin.

Post-operatively

- Ensure proper lid and ocular hygiene post-operatively.
- Post-operative topical antibiotics for Seven days should be instilled to minimize post op infections.
- Monitor IOP post operatively.
- Don't use anti-VEGF agents in pregnant women.
- Don't wash eyes for minimum of 24 hrs post-procedure and swimming for minimum 3 days.
- Do not give inj.Avastin bilaterally in one setting, ensure gap of atleast week.

18. OPHTHALMIC ABBREVIATIONS

SR.NO	ABBREVIATI	FULL FORM
1	AAG	Acute angle closure Glaucoma
2	ACT	Alternate cover Test
3	AL	Axial Length
4	AT	Applanation Tonometry
5	AC	Anterior Chamber
6	ACD	Anterior Chamber depth
7	ACIOL	Anterior Chamber intraocular lens
8	ALT	Argon laser trabeculoplasty
9	APD, RAPD	(Relative) Afferent pupillary defect
10	ARMD, AMD	Age-related macular degeneration
11	ATD	Aqueous tear deficiency
12	AC/A	Accommodative convergence/Accommodation ratio
13	ACC	Accommodation
14	ALT	Alternating
15	A/V	Arteriole vein ratio
16	BDR	Background diabetic retinopathy

SR.NO	ABBREVIATI	FULL FORM
17	BRAO	Branch retinal artery occlusion
18	BRVO	Branch retinal vein occlusion
19	BCL	Bandage contact lens
20	BC	Base curve
21	BSV	Binocular single Vision
22	CACG	Chronic angle-closure Glaucoma
23	(C)	With correction
24	CE/IOL	Cataract extraction with intraocular lens implant
25	C_3F_3	Perfluoropropane
26	CME	Cystiod macular edema
27	CNV, CNVM	Choroidal neovascularization (Neovascular membrane)
28	COAG	Chronic open-angle glaucoma
29	CPC	Cyclophotocoagulation
30	CRAO	Central retinal artery occlusion
31	CRS	Chorioretinal scar
32	CRVO	Central retinal vein occlusion
33	CR, CRX	Cyeloplegic refraction
34	CS	Cortical spoking
35	CSDME	Clinically significant diabetic macular edema
36	CSR,CSCR	Central serous (chorio) retinopathy
37	CLARE	Contact lens associated red eye
38	C/D	Cup-disc ratio
39	C/O	Complains of
40	DCT	Dacryocystectomy
41	DCR	Dacryocystorhinostomy
42	DES	Dry eye syndrome
43	DME	Diabetic macular edema
44	DR	Diabetic retinopathy
45	DSAEK	Descemet stripping automated endothelial keratoplasty
46	DALK	Deep anterior lamellar Keratoplasty
47	DMEK	Descemet’s membrane endothelial Keratoplasty
48	DLEK	Deep Lamellar endothelial Keratoplasty
49	D	Dioptres
50	Deyl	Dioptres cylinder

SR.NO	ABBREVIATI	FULL FORM
51	Dsph	Dioptres sphere
52	DVD	Dissociated Vertical Deviation
53	E	Esophoria
54	ECCE	Extra capsular Cataract extraction
55	EKC	Epidemic keratoconjunctivitis
56	EL	Endolaser
57	ELP	Effective lens position
58	ERM	Epiretinal membrane
59	ET	Esotropia
60	E (T)	Intermittent esotropia
61	FFA	Fluoroscein angiography
62	FAX, AFx	Fluid-air exchange
63	FTCF	Full to counting fingers (reference to confrontational visual)
64	GAT	Goldmann Applanation Tonometry
65	GATT	Gonioscopy assisted Transluminaltrabeculotomy
66	GDI	Glaucoma drainage implant+
67	GVF	Goldmann Visual Field
68	GPC	Giant Papillary Conjunctivis
69	HM	Hand motions
70	HRAO	Hemi-retinal artery occlusion
71	HRVO	Hemi-retinal vein occlusion
72	HSV	Herpes zoster Ophthalmicus
73	HVF	Humphrey visual field
74	HZO	Herpes zoster Ophthalmicus
75	H/O	History of
76	HEMA	Hydroxyethly methacrylate
77	IOL	Intraocular lens
78	IOP	Intraocular Pressure
79	IRF	Intra-retinal fluid
80	IRH	Intra-retinal hemorrhage
81	IRMA	Intra retinal microvascular abnormality
83	IR	Inferior Rectus
84	IO	Inferior oblique
85	JOAG	Juvenile open-angle glaucoma

SR.NO	ABBREVIATI	FULL FORM
86	K	Keratometry
87	KCS	Kerato conjunctivitissicca
88	KP	Keratic precipitates
89	LASIK	Laser in situ keratomileusis
90	LHT	Left hypertropia
91	PL	Light perception
92	LPI	Laser peripheral Iridotomy
93	LD	Lattice Degeneration
94	LL	Lower Lid
95	LR	Lateral Rectus
96	LPS	Levator Palpebrae Superioris
97	MA	Microanecurysm
98	MGD	Meibomian gland dysfunction
99	MH	Macular hole
100	MP	Membrane peeling or macular pucker
101	MR	Medial Rectus
102	NAION	Non-arteritic ischemic optic neuropathy
103	no PL	No light perception
104	NPDR	Nonproliferative diabetic retinopathy
105	NS	Nuclear sclerosis
106	NVA	Neovasularization of the angle
107	NVD	Neovascularization of the disc
108	NVE	Neovascularization elsewhere
109	NVG	Neovascular glaucoma
110	NVI	Neovascularization of iris
111	OD	Oculus dexter (right eye)
112	OGR	Open globe repair
113	OS	Oculus sinister (left eye)
114	OU	Oculus uterque (both eyes)
115	OHT	Ocular hypertensive
116	PAC	Primary angle-closure
117	PACG	Primary angle-closure glaucoma
118	PACS	Primary angle-closure syndrome

SR.NO	ABBREVIATI	FULL FORM
119	PAS	Peripheral anterior synechiae
120	PC	Posterior chamber
121	PCF	Posterior capsule fibrosis
122	PCIOL	Posterior Chamber intraocular lens
123	PCO	Posterior capsule opacity
124	PDR	Proliferative diabetic retinopathy
125	PED	Pigment epithelial detachment
126	PEE	Punctate epithelial erosion
127	PERRL (A)	Pupils equal, round, reactive to light and accommodation
128	PH	Pinhole
129	PI	Peripheral Iridotomy
130	PK,PKP	Penetrating Keratoplasty
131	POHS	Presumed Ocular Histoplasmosis syndrome
132	PPA	Peripapillary atrophy
133	PPL	Pars Planalensectomt
134	PPV	Pars Planavitrectomy
135	PRK	Photorefractive Keratectomy
136	PRP	Panretinal Photocoagulation
137	PS	Posterior synechiac
138	PSC	Posterior sub capsular cataract
139	PTK	Phototherapeutic keratectomy
140	PVD	Posterior Vitreous detachment
141	PVR	Proliferative Vitreo retinopathy
142	PXG	Pseudoexfoliation syndrome
143	PXG	Pseudoexfoliation glaucoma
144	PD	Prism Dioptre
145	PAM	Potential acuity meter
146	P_h	Pin Hole
147	PMMA	Polymethylmethacry late
148	RAPD	Relative afferent pupillary defect
149	RD	Retinal detachment
150	RGR	Ruptured globe repair
151	RHT	Right hypertropia
152	RK	Radial Keratotomy

19. **<u>FLOW Charts</u>**
<u>Work FLOW CHART</u>

OPD CASUALTY TRANSFER IN FROM OTHER DEPARTMENTS

IPD
↓
LABORATORY AND RADIOLOGY
↓
PREANASESTHESIA ROOM
↓
PRE OPERATIVE ROOM
↓
OPERATION THEATRE
↓
POST OPERATIVE ROOM
↓
RESPECTIVE WARD

20. **LIST OF RECORDS IN THE DEPARTMENT**

Sr. No	Index	Type of Records
1.	OT Register	Register
2.	OPD Register	Register
3.	IPD Register	Register
4.	Minor OT	Register
5.	WET LAB	Register
6.	Corneal Clinic	Register
7.	Retina	Register
8.	Glaucoma	Register
9.	Squint Clinic	Register
10.	ND YAG Laser	Register
11.	PRP Laser (Green)	Register

21. LIST OF FORMS

Sr.	**Index**	**Type of Record**
1	Operative notes	Form
2	Informed Consent Form for Surgery	Form
3	Informed Consent Form for Minor Procedures (OCT/FFA/CHALAZION I & C	Form
4	Camp Formats	Form

22. LIST OF CHECKLIST

Sr. No	**Index**	**Type of Record**
1.	Checklist for elective ocular surgery	Checklist

23. ANNEXURES

Annexures-1 Checklist for elective ocular Surgery

Sr.	Title	Yes	No
1	Random blood Sugar <=200mg%		
2	Blood pressure <150/90 mmHg		
3	Physician clearance in case of systemic diseased		
4	Preoperative topical antibiotics		
5	Written informed consent in patient's Language		
6	No contact procedure/Syringing one day prior to surgery and on day of surgery		
7	Working microscope, sterilized gloves and disposable adhesive drapes for each case		
8	Betadine on skin and periorbital area for 3 mins and betadine in conjunctival sac for 1 min		
9	Note batch no. of Irrigating fluids		
10	Instruments autoclaved/ ETO		
11	Maximum use of disposables		