

# **Outpatient Department Protocol**

# **GENERAL INSTRUCTION FOR STAFF AND PATIENTS**

## **General Principles for Staff**

1. Ensure basic principles of Social distancing and Correct use of PPE is being adhered to as per guidelines provided in Annexure -
2. Compulsory Hand-washing every 2 hours
3. Patient identity to be checked by seeing the ID card, avoid touching the ID card
4. Avoid holding patient's hand while escorting
5. Cleaning of trial frame and lenses, BP Cuff and slit-lamp and any other instruments having direct contact with the patient after each examination with Isopropyl alcohol.
6. Strict adherence to Referral and Management criteria to minimize cross-referrals (Annexure – Cross Referral Criteria)
7. Minimal communication.
8. All staff to be aware of patient flow layout
9. Avoid unnecessary contact with patients and possible fomites e.g ID cards, Referral slips
10. Face shield to be worn by doctors & MLOP performing duct patency, MLOP assisting for suture removal & YAG laser capsulotomy.
11. Minimize patient contact time in the cubicle
12. Ensure compassion for patient at all points of care while maintaining safety
13. Emergency cases to be given priority

## **General Principles for Patients**

1. COVID 19 consent form with self-Declaration to be signed
2. Hand washing before entering the hospital Premises
3. Adhere to all hospital policies and protocols related to COVID 19
4. Ensure social distancing is maintained
5. Face Mask to be worn at all times

# **STANDARD OPERATING PROCEDURE FOR GENERAL OPD**

## **Refraction**

Would be done for all new patients or review patients more 3 months from last visit

## **Cleaning Protocol:**

1. Trial set used lens will be cleaned for every patient
2. Patient waiting chairs will be cleaned with lysol once in 2 hours

## **PPE:**

1. All sisters must wear mask and face shield
2. Use hand rub after touching each patient

## **Doctor Examination and Investigation**

Aim – to reduce unnecessary investigations and subsequent increasing in waiting time

PPE equipment – Respirator, Face shield, Gloves

Protocol

1. NCT – NOT TO BE DONE TO AVOID GENERATION OF AEROSOLS
  - a. Applanation tonometry for necessary cases only
  - b. Gonioscopy to be avoided in General Units - Refer to Glaucoma as per referral criteria
2. Blood pressure - not routine, Only for suspected cases - Hypertensive retinopathy G4, Nerve palsy, Acute Retinal Vascular occlusion
3. Dilatation for - patient with media opacities obstructing undilated fundus evaluation
4. Avoid cross referrals within the unit and among other departments
5. Proper documentation to maintained regarding discussion of cases with senior MO
6. Medical consultant opinion for the patients seen by the PGs or fellows can be handled by the consultant by reaching the fellows cubicles.

## **OP MLOP Protocol**

### **General Guidelines for MLOPs:**

- To make sure patient is wearing mask and oral confirmation of patient having washed his hands before entering the hospital.
- To sanitize hands after contact with every patient or every half an hour.
- MLOP to wear unsterile gloves, masks at all times and face shields at required stations where close contact with patient is expected (MRD sister, Refraction, Investigation).
- To refrain from unnecessary contact or conversation with any patient/ attenders unless necessary.

- Ensure social distancing among patient and staff is followed at all times within the department as much as possible.
- To keep an eye out for any patients not following instructions and to bring this to the notice of senior MLOP/Doctor in the clinic for ensuring safety precautions are followed by all.

#### **Patient Outflow**

1. A separate counselling station has been set up outside the pharmacy where the medication dose and frequency would be explained to the patients according to the prescription to avoid overcrowding in the units.
2. To ensure that there is a one ENTRY and EXIT after completion of all steps patients will be directed to the gate
3. Optical and Medicine delivery counter has been exteriorized in order to avoid crowding inside the hospital premises.

# **STANDARD OPERATING PROCEDURE FOR CATARACT SERVICES**

Cataract is the leading cause of bilateral blindness in India. It has been reported that cataract is responsible for 50-80% bilateral blindness in the country. Development of cataract is a part of the natural ageing process. Even though vision lost due to cataract can be restored through a simple and minor procedure, it remains as one of the significant causes of preventable blindness. Since the establishment of Aravind Eye Hospital, cataract consultation and surgeries have been a significant part of its services. As the largest provider of eye care services in South India, a considerable section of the society has benefitted from the Cataract and IOL Services at Aravind. In 2006, Alcon selected the department in Madurai as a centre for excellence in cataract services. Around 2 lakh cataract surgeries are performed annually at Aravind Eye Hospitals.

The Cataract and IOL Department is a well-managed unit in providing, high-quality, high-volume surgery with experienced doctors, adequate support staff, infrastructure and State of art technology. This is the largest cataract department in the world and is dedicated to excellence in cataract services. It is run by a team of senior consultants who work with junior consultants, long-term fellows and residents along with trained paramedical staff including refractionists and counsellors.

Since this is COVID-19 pandemic era, various changes were made in the patient flow, examination protocols and cleaning process to ensure less spread of infection. This manual describes the recently changed protocols in Cataract services.

## **General Instructions for all Employees:**

### **Personal Protective Instructions:**

- Patient identity to be checked by seeing the ID card, avoid touching the ID card
- Avoid holding patient's hand while escorting
- Patients to be seated in alternative chairs
- Maintain physical distancing in all the places
- Maintain minimal communication
- All staff must wear the appropriate personal protective equipment as per below details
  - Registration Counter :
    - Three layers mask to be worn along with face shield
    - Since they are handling with patient ID card, they must wear glove also
  - Refraction :
    - Respirator mask to be worn along with face shield

- OP MLOP :
  - All employees should wear respirator mask
  - Face shield to be wear during assisting for suture removal & YAG capsulotomy
  - Face shield, gown & gloves to be wear during duct patency test
  - Glove to be wear during 1<sup>st</sup> post-operative day patient's eye cleaning
- A-Scan MLOP :
  - Respirator mask to be worn along with face shield
- Counsellors :
  - Respirator mask to be worn along with face shield
- Admin staff :
  - Three layers mask to be worn
- Doctors :
  - Respirator mask to be worn along with face shield
  - Glove to be worn during the examination of any infection cases

### **Cleaning Protocol:**

- Patient should apply hand sanitizer (chlorhexidine gluconate solution IP equivalent to 0.5% W/V of chlorhexidine gluconate isopropyl alcohol IP 70%) before cataract clinic registration (100 & 106 counters)
- Face shield has to be cleaned after examining infection cases/ duct examination
- To clean the hands with hand sanitizer after examining every patient
- To wash the hands with Dettol solution once in 30 minutes
- Slit lamp and the protector[acrylic sheet] cleaning with hand sanitizer to be done after examining every patient
- Chairs & tables has to be cleaned with Lysol once in 2 hours

### **Bio medical waste:**

- Yellow waste bin: cotton swabs, bandages, dressings, fluorescein strips.
- Red waste bins: surgical gloves, plastic waste, syringes.
- Green waste bin: general waste like paper, food, etc.
- Used disposable mask should be disposed in closed bin [ yellow ]

### **Accepted Referral Protocol for Cataract Clinic**

- Lens induced glaucoma
- Traumatic cataract
- Traumatic subluxated cataract
- Endophthalmitis

- Post-operative uveitis
- Post-operative complications which requires resurgery – Wound gape, blood clot in AC, cortex in AC, Subluxated IOL, Decentered IOL, etc.,
- Premium IOL [ MFIOL & Toric IOL ] workup

### **Protocol for cataract clinic Registration:**

- Patient should apply hand sanitizer before registration
- MLOP should wear respirator mask and glove
- Patient & attender with face mask only allowed to the clinic / hospital
- Only one attender will be allowed into clinic
- At a time 10 patients along with attenders can accommodate in the reception waiting area
- One patient has to be stand near counter at a time

### **Cleaning protocol – Investigation:**

- Registration desk should be cleaned with Lysol atleast 3 times a day
- System, mouse, key board, printer, CPU, phone to be cleaned with Isoprophyl Alcohol atleast 2 times a day
- Patient waiting chairs to be cleaned with Lysol atleast 3 times a day

### **Protocol for Refraction:**

- 10 patients can accommodate in one slot
- Autorefractor (AR) to be done in one cubicle one patient at a time
- 4 refractionists will perform refraction in 4 cubicles
- Visual acuity examination to be done :
  - All routine review cases
  - Trauma cases
  - Patient with redness, irritation, watering & pain
- Visual acuity with pinhole examination to be done :
  - Patients who are undergoing cataract surgery
  - For all Patients whose uncorrected visual acuity (UCVA) less than 6/6
- Refraction to be done :
  - Post op day 1 patients, who undergone premium IOLs
  - One month post-operative patients
  - Patient wants to change spectacles
  - Post YAG capsulotomy (to prescribe spectacles)

### **Cleaning protocol - Refraction**

- After each patient, Autorefractor chin rest & head rest should be cleaned with hand sanitizer
- Trial frame & used lenses should be cleaned with hand sanitizer by MLOPs after every patient and the room will be kept ready for next patient
- After checking the old spectacles of the patient, use hand sanitizer to clean the hands

### **Protocol for Investigations**

- 5 patients can accommodate in one slot
- Only one patient to be allowed inside the investigation room
- Only one procedure ( Duct / BP) to be done at a time in the investigation room
- Non-contact tonometry (NCT) to be avoided
- Duct patency test to be done for the patients undergoing for cataract surgery
- Blood pressure to be done for the patients undergoing for cataract surgery

### **Cleaning protocol – Investigation**

- Sterilized cannula should be used for each patient.
- MLOP should wear face shield and glove while doing duct patency.
- After the procedure rexine sheet on the table should be cleaned with hand sanitizer for each patient.
- BP cuff should be cleaned with hand sanitizer after each patient.

### **Protocol for Dilation:**

- Requirement of dilation to be decided by the examining doctor
- Patients asked to retract the lower lid while applying the dilating drops
- Dilation to be done in following patients:
  - Vision is not correlating with the grade of cataract
  - Post-operative patients with poor vision
  - Iritis
  - Trauma
  - Patient undergoing cataract surgery
  - Patient undergoing YAG laser capsulotomy
  - Diabetic patients
- Dilation not required :
  - Patients with 6/6 vision
  - Patient wants to change spectacles
  - Routine review cases



### **Protocol for Doctor Examination:**

- 9 Doctors can accommodate at a time in 9 cubicles
- Only three persons (Doctor, patient & assisting MLOP) will be allowed inside the cubicle at a time
- All medical officers and senior fellows will do the final consultation and no need preliminary examination separately
- Medical consultant opinion for the patients seen by the fellows can be handled by the consultant by reaching the fellows cubicles
- For wheel chair or vulnerable patient, examination to be done by medical officer under slit lamp with wheel chair itself. Avoid shifting the patient from wheel chair to examination chair
- To check intra ocular pressure by using applanation tonometry in one cubicle for patients one at a time, who undergoing for cataract surgery
- Status of the eye, pre-operative and post-operative instructions should be discussed with the patient and the attender after examining the patient.

### **Protocol for Cataract Surgery advice**

- All types of cataract can be taken for surgery
- All premium IOLs can be advised
- All types of cataract surgeries except FEMTO [ Till further notification ] can be advised
- Aseptic protocol & PPE to be followed as per norms.

### **Cleaning protocol**

- Slit lamp should be cleaned after each patient with hand sanitizer
- After applanation tonometry prism should be cleaned with isopropyl alcohol IP 70% immediately after the examination.
- System table, key board and mouse should be cleaned with isopropyl alcohol 70% three times a day.

### **Protocol for A-Scan.**

- 10 patients can accommodate in one slot [ waiting area ]
- 4 patients can accommodate in one slot in the A-scan room
- Two patient [ one patient per cubicle] can accommodate at a time in the A-Scan room
- A-scan have to be performed after doctor advise for cataract surgery
- Mostly optical biometry should be used with IOL Master 500, IOL Master 700, LENSTAR
- Immersion biometry / applanation method should be used only in advanced cataract

### **Cleaning protocol – A-Scan**

- Chin rest and head rest to be cleaned after every patient with hand sanitizer
- Probe and immersion shell should be cleaned after every patient with 70% isopropyl alcohol

### **Protocol for Cataract Surgery Counselling:**

- Counselling to be given to the patient undergoing cataract surgery
- One patient & the attender (if available) can accommodate in the room at a time
- 5 counselors can do counselling in the 5 cubicles.
- 10 patients can accommodate in one slot [waiting area].
- Patient signature to be received in the regular cataract surgery consent form and also in the Special COVID 19 consent form. Declaration sign to be given by a doctor also with date and time
- Scheduling is done in batches (eg 7am, 8am, 9am etc)
- Points to be explained during counselling
  - About the eye condition and the requirement of cataract surgery
  - Only one attender to be accompanied with the patient on the day of surgery
  - Day care process is preferred and to come only at specified time
  - Instruction to be given regarding need for hand hygiene, mask, physical distancing, minimal contact
  - To bring their topical and systemic medication in a transparent plastic cover
  - To bring fitness certificate and relevant investigation reports if advised
  - Not to bring any unnecessary items / luggage's to the hospital
  - To wear clean and washed clothes on the day of surgery (avoid jeans/ lungi etc)
  - To stay away from any social gathering before and after surgery (15 days)
  - If there is history of fever to call and inform the counsellor/ hospital before surgery
  - Digital payment method (credit card/ online) is preferred
- To be confirmed through phone call on previous day that there is no history of contact and fever

### **Protocol for pre-operative systemic patients**

- Blood Sugar to be checked for patient undergoing cataract surgery.
- Blood urea, Serum Creatinine to be checked for the patient who is undergoing Cataract surgery under IV mannitol
- One patient can accommodate in the blood collection room at a time.
- Blood pressure to be checked - with electronic BP apparatus; follow additional disinfection protocols between patients
- ECG as per current protocol
- If any patient having cardiac, pulmonary, renal, uncontrolled DM, HT , any chronic diseases, cataract surgery to be done after physician consultation Pulse oximetry for all patients (Normal  $\geq 96$ )
- X Ray Chest, CBC, Bleeding time and Clotting time to be done only in required cases as advised by physician/ anesthetist
- As per Government guidelines, COVID 19 test need not be done, unless there is a suspicion and advised by the ophthalmologist/ physician/anesthetist. If +ve, patient to be referred to a COVID treatment centre and scheduled after recovery and a -ve RT- PCR test.

### **Protocol for 1<sup>st</sup> day post-operative Daycare:**

Patients who are coming from 100kms away from Madurai can go back to their home after cataract surgery (after one hour observation). These patients asked to come for doctor consultation on the next day. This process is called as Day Care. We have to follow below protocol for these patients during the 1<sup>st</sup> post-operative day consultation.

- 1<sup>st</sup> day post -operative patients asked directly come to the second gate of the cataract clinic (Area number 110).
- MLOP will retrieve the case sheet after verification of patient's ID card in the registration counter
- Then MLOP will guide the patient to the eye cleaning cubicle. After cleaning the operated eye with sterile cotton swab , MLOP will instill antibiotic drop
- After eye cleaning, patient will go for visual acuity examination
  - Vision & vision with pinhole to be checked for 1<sup>st</sup> day post-operative patients
  - Patients who undergone toric & multifocal IOLs, should be checked for refraction
  - After visual acuity and refraction, dilatation to be done

- After dilation patient should be seen by medical officer
- Post-operative instruction to be given to the patients through group counselling by OP MLOP. At a time 5 patients along with attenders only will be allowed in the counselling hall to maintain social distancing

### **Follow up Protocol for 1<sup>st</sup> day post-operative daycare patients**

- Patients with good vision - To ask for 1 month review
- Patient with Corneal edema – Prescribe medicine accordingly & ask for review after one month
- Post-operative Iritis - Prescribe medicine accordingly & ask for early review according to the severity
- Patient with intraop complication- to review after 15 days
- Avoid unnecessary early reviews

### **Protocol for One month Post-operative patients**

- Visual acuity and refraction to be done for all patients
- If other eye having cataract, ask follow up according to the density of cataract
- Both eyes pseudophakia – should give spectacles if needed and one year review
- Patients with systemic illness, we have to ask for every year review
- Patients with glaucoma and on antiglaucoma medication, we have to ask glaucoma clinic review on the same day
- Patients with retinal pathology, we have to ask for retina review on the same day

### **Protocol for Suture removal**

- Suture removal can be performed for 5 patients per day
- After getting the signature in the regular consent form & special covid -19 consent form, the attender will be accommodated in the waiting area
- Before suture removal blood sugar test to be done
- Suture removal advice and removal to be done only by medical consultants.
- Suture removal to be done for clear corneal phaco sutures, loose sutures and or exposed knots
- Before doing the procedure antibiotic eye drops should be instilled 6 times into the suture removal eye
- To maintain sterility, suture removal to be done in a single cubicle
- After the procedure antibiotic eye drops should be prescribed for 1 week and asked for review according to the protocol

### **Cleaning protocol - Suture removal**

- Slit lamp should be cleaned with hand sanitizer by MLOP
- Medical officer and the assisting MLOP should wash hands with Dettol before the procedure
- Use sterilized forceps for suture removal
- Before and after suture removal, table and chair also to be cleaned well

### **Protocol for YAG capsulotomy**

- 20 patient can be done YAG capsulotomy per day
- YAG capsulotomy to be advised only by senior fellows or medical consultants
- After getting the signature in the YAG capsulotomy consent form & special covid -19 consent form, the attender will be accommodated in the waiting area
- YAG capsulotomy to be done only for significant PCO & posterior segment treatment required patients
- YAG capsulotomy to be done only by senior fellows or medical consultants
- Post Yag capsulotomy protocol to be followed.

# **STANDARD OPERATING PRODECURE FOR** **GLAUCOMA SERVICES**

## **Registration Area**

- All staff and patients will wear surgical masks / staff will wear gloves in addition
- 18 persons can be housed in Registration Area
- After Registration and print out of Route Slip, a senior MLOP will triage and categorize the patient visit (New, Post-operative & Post Laser, urgent and Routine Review)
- Attenders only for children and vulnerable patients permitted into clinic

## **Cleaning Protocol**

- Clean the MRD desk surface with Lysol once in 2 hours
- Wrist band should be issued to patients and the attender of the vulnerable patients
- Patient waiting chairs will be cleaned with lysol once in 2 hours

## **PPE Usage**

- All sisters must wear mask
- Gloves should be worn while handling cash

## **Vision and Refraction**

- All MLOP staff to use surgical masks and gloves
- New registration from units /specialty clinics to go directly to designated Doctor examination Area
- All review patients will have vision with Pinhole test only
- Trial frames and trial lenses to be disinfected as per recommended protocol
- Refraction done only for those who require prescription for glasses or if pinhole vision less than previous visit or if indicated / directed by doctors after examination
- After Pinhole vision patients to be directed to respective Doctor examination Area
- Non-Contact tonometry and CCT for new patients will be suspended. CCT to be performed for new patients only on doctor order

## **Cleaning Protocol**

- Trial set used lens will be cleaned for every patient.
- Patient waiting chairs will be cleaned with lysol once in 2 hours.

## **PPE**

- All sisters must wear mask and gloves
- Use hand rub after each patient

### **OPD/ Doctor Examination Area**

- Doctors' cubicles to be designated as follows: New patients- 4, Post-operative / post laser patients -2, Critical/ urgent patients-2, Routine Review -5
- Separate, as far as possible unidirectional patient flow for each category of patients
- All doctors to wear PPE that includes masks face shield, and gloves. Use auroscrub after every patient

### **Review Patients: Following Protocol to be followed**

- All review patients to be dilated with Tropicamide unless mentioned in the previous visit (to assess patency of LPI / PACS review patients without LPI) on arrival in the patient waiting Area by a senior MLOP
- Doctors' evaluation of review patients after dilatation and includes slit lamp examination and GAT. All slit lamps to have Breath shields to be disinfected preferably with auroscrub after every use
- GAT prism to be disinfected with alcohol swab and sterile cotton swab after each use. All GAT prisms will be soaked in 0.5% Sodium hypochlorite solution for 5 minutes prior to start of the day and completion of the clinic in the evening.
- No routine Gonioscopy for review patients unless specifically indicated in the discretion of examining doctor (as in - sudden spike in IOP, decreasing response to medical treatment, suspected progressive angle closure in phakic eyes Post LPI, suspected NVI in RVO/ DR)
- Gonioscopy to be disinfected with alcohol swipe and running tap water after every use
- If IOP not at target / progression suspected/ step up therapy and schedule HFA + OCT within 3 months (earlier by discretion of examining doctor)
- Clinically stable patients to be rescheduled for review 6-8 months with OCT+ HFA next visit
- Treatment and Prescription to be counseled by the doctor and repeated or reinforced by OP senior MLOP- these patients will not go to counseling unless they have been advised laser/ surgery

### **New patients- following protocol to be followed**

- Vision /NCT/CCT will not be checked routinely
- CCT to be seen after doctor examination only if indicated and can be deferred unless necessarily indicated
- Patients will be taken up for doctor examination directly after registration
- Doctors with appropriate PPE will perform SLE, GAT and gonioscopy, following proper disinfection of all equipment's after each use
- Dilatation ordered if proper view of posterior segment not available; if Discs and macula possible to evaluate, dilatation may be deferred to later visit

- Final examination by doctor for 90 D examination and treatment advised
- Baseline investigations like OCT/ HFA can be deferred if clinical examination suggestive of definite glaucoma
- In glaucoma suspects and OHT , OCT can be ordered for definitive treatment / Defer HFA until later visit
- Treatment to be explained by Doctor with assistance of OP MLOP if there is a language barrier/ defer reference to counselor room unless a procedure needs to be scheduled.

### **Urgent/Critical patients**

- Directly refer for doctor examination after vision with pinhole
- Examination and treatment by doctors/counseling as above
- Pay attention to disinfection of all equipment used

### **Post-operative/Post laser Visit**

- Refer directly for doctor examination after vision / refraction
- Clinical examination and treatment and follow up counseled by doctor and senior MLOP
- Defer referring to counseling staff
- Schedule Laser suturlysis / bleb needling when indicated

### **Cleaning Protocol**

- Slit lamp and the acrylic sheet cleaning with hand rub and use hand rub after touching each patient
- Chairs has to be cleaned with Lysol

### **PPE**

- Face shield, face mask, Gloves for Doctors
- Face mask and gloves for sisters

### **Investigation**

- NCT totally suspended
- CCT only on doctor's order/ not as a routine
- Defer Perimetry unless surgery is advised or significant progression suspected to step up therapy
- OCT for suspects/ ocular hypertensive/ baseline RNFL can be scheduled based on availability
- UBM/ B Scan to be deferred unless urgent
- Laser PI only for PAC/ PACG- defer for PACS unless urgent dilatation is required
- Laser suturlysis when indicated
- All contact instruments to be disinfected with alcohol swipe and sterile cotton swab after each use.



### **Cleaning Protocol**

- Clean the equipment properly with relevant disinfectant after each patient intervention.
- Use the handrub after touching each patient.

### **PPE**

- Face Mask and gloves.
- Face shield for all technicians.
- Cling wrap can be used on the machine while doing the OCT or we can fix an acrylic sheet in the OCT machine to prevent the spread of infection.

### **Laser Procedures**

- At a time 12patients + 8 attendants can be accommodated in designated area for lasers (305).
- 1 doctor will be posted to perform YAG PI and LSL every day.
- For 1 hour, YAG PI can be performed in 4 patients.
- After getting the consent sign, the attender will be accommodated in the waiting area at the corridor.
- Fellow to decide if any patient needs physician clearance for cough, fever.

### **Cleaning Protocol**

- Wash the lens (if used) in running water and clean with Aurorub.
- Clean the laser apparatus with aurorub and use the hand rub after each procedure.

### **PPE**

- An acrylic sheet has to be fixed on the slit lamp and laser apparatus which also has to be sterilized after every patient.
- Face mask and gloves for Doctors and sisters.

### **Counselling**

- At a time 40 patients with 20 attendants can wait in the review counseling area.
- At a time 10 patients with 5 attendants can wait in the new counselling area.

### **Cleaning Protocol**

- Clean the counselling desk surface with Lysol once in 2 hours.
- Patient waiting chairs will be cleaned with lysol once in 2 hours.

### **PPE**

- All sisters must wear mask.
- Use hand rub after each patient.

# **STANDARD PROCEDURE FOR VITREO RETINAL SERVICES**

## **General Instructions**

- All staff must wear the PPE recommended for their patient care role risk stratification
- Social distancing norms must be followed like alternate seating should be followed at all stations
- Patient have to wear face mask inside the hospital
- Slit lamps & Indirect ophthalmoscope should have the guard
- Cleaning of all furniture once every 3 hours

## **Registration Area - 200**

### **Registration Area**

- No attenders will be allowed into clinic
- Announcement system will be used to call the patients
- At a time 10 patients can accommodate in the reception area seating
- Patient with face mask only will be allowed to the clinic / hospital

### **Cleaning Protocol**

- Wrist band should be issued to Patients and the attender of the vulnerable patients
- Cleaning of all furniture once every 3 hours

### **PPE:**

- All sisters must wear mask
- Gloves for cash collection sister

### **Refraction & NCT (201 – 203)**

### **CAPACITY:**

- 10 patients can accommodate in one slot
- To verify by asking patient if he/she has any travel history.
- Any symptoms like fever, cough, breathing problems to be asked.
- Whether patient has signed covid 19 form at the registration counter.

## Cleaning Protocol

- Trial set used lens will be cleaned for every patient
- Cleaning of all furniture once every 3 hours

## PPE:

- All sisters must wear mask
- Use hand rub after touching each patient

## Retina - OPD (204 – 207)

### Capacity

- 12 Doctors can be accommodate at a time (12 chair units +2 Slit lamp for Prelims)
- To verify by asking patient if he/she has any travel history.
- Any symptoms like fever, cough, breathing problems to be asked.
- Whether patient has signed covid 19 form at the registration counter.

### Guidelines

- All medical officers and senior fellows will do the final consultation and no entertainment of preliminary and final separately.
- In the preliminary area (202) fellows to triage the patient, whether dilation needed or not.
  - **Dilation not needed:** Patients with no media opacity, stable DR patients, post-operative follow up patients, CSCR, Retinitis pigmentosa & other dystrophies, all these patients OPTOS to be taken and sent for MO finals
  - **Dilation needed:** All new patients, myopia patients who need peripheral screening, patients who have been planned for Surgery, RDs, Open globe and closed globe injuries to be dilated and kept for MO finals
- 4 patients : 1 Doctor for 1 hour will be followed
- All cubicles will be numbered and the patient flow will be separated through two entry gates
- Medical consultant opinion for the patients seen by the fellows can be handled by the consultant by reaching the fellows cubicles.

## **ROP**

- ROP – 5 babies with mother (only) can accommodate in the ROP waiting area

## **Cleaning protocol**

- Slit lamp and the acrylic sheet cleaning with hand rub and use hand rub after touching each patient
- Chairs has to be cleaned with lysol, Cleaning of all furniture once every 3 hours

## **PPE :**

- Face shield, face mask, Gloves for Doctors
- Face mask for sisters

## **Retina Investigations**

### **Room No 209, 210, 215**

- To verify by asking patient if he/she has any travel history.
- Any symptoms like fever, cough, breathing problems to be asked.
- Whether patient has signed COVID 19 form at the registration counter.
- Once they complete the investigations patients will be accommodate in the outside waiting area and the Route slip will be given to the Doctors
- Once the doctors verified the investigation reports and enter the interpretation into the EMR the patient will be seen by the doctors at the counselling area.

### **B scan - USG (209)**

- The waiting area capacity is for 3 - 4 patients only. Another machine can be shifted to the IOL pre op counseling area for the purpose to handle the GOPD and IOL patients, Free Hospital patients

### **Blood Collection Area (210 C)**

- To verify by asking patient if he/she has any travel history.
- Any symptoms like fever, cough, breathing problems to be asked.
- Whether patient has signed covid 19 form at the registration counter.
- Blood investigations area can accommodate with 4 patients for 30 minutes (For 2nd floor patients only)
- ERG - 1patient for 1 hour

## **Cleaning Protocol**

- Clean the equipment properly with relevant disinfectant after each patient intervention
- Use the handrub after touching each patient
- Cleaning of all furniture once every 3 hours

## **PPE**

- Face Mask and gloves
- Face shield for all technicians (USG)
- Optos – We can use Cling wrap on the Optos machine for every patient

## **FFA / OCT (212)**

- For OCT – 7 – 10 patients accommodate at a time (For 1 hour)
- For FFA – 2 patients along with the attender for 1 hour
- To verify by asking patient if he/she has any travel history.
- Any symptoms like fever, cough, breathing problems to be asked.
- Whether patient has signed covid 19 form at the registration counter.
- Only one attendant to be allowed with the patient.
- MLOP to wear gloves, masks, face shield
- Acrylic sheet can be fixed on the OCT machine
- To make it sure patient is wearing mask and has washed hands before starting OCT.
- MLOP to clean OCT machine before and after completion of procedure with alcohol swabs. (Handrub)
- FFA syringes and vials to be disposed in the respective dustbins.
- MLOP to wash hand before every procedure.
- Cleaning of all furniture once every 3 hours
- Minimal touch policy to be followed strictly.
- Proper counselling of patient to be done after the end of procedure.

## **Retina Laser (211)**

### **Capacity**

- At a time 6 – 8 patients can accommodate
- 3 doctors will be posted to handle the 3 laser machines
- For 1 hour 6 patients will complete with laser

### **Laser Waiting Area**

- To verify by asking patient if he/she has any travel history.
- Any symptoms like fever, cough, breathing problems to be asked.
- Whether patient has signed covid 19 form at the registration counter.
- After getting the consent sign the attender will be accommodated in the waiting area at the corridor
- Only one attendant to be allowed with the patient if required patients.
- Proper counselling of patient to be done after the end of procedure

### **Cleaning protocol**

- In case of redness/discharge noted before start, laser to be deferred.
- To make it sure patient is wearing mask and has washed hands before starting laser.
- Doctors to dispose gloves after every laser and wash hands. (Doctors can use hand rub over the gloves after every laser)
- MLOP to clean laser machine before and after completion of procedure with alcohol swabs.(We can use Hand rub)
- The laser contact lenses or 20 dioptre lens to be washed with soap and water after every use or dip in sodium hypochlorite (0.5%) solution
- Cleaning of all furniture once every 3 hours

### **PPE**

- Doctors to wear mask, gloves and face shield. (An acrylic sheet has to be fixed on the laser machine)
- MLOPs to wear gloves, masks, face shield.

## **Retina injection (261)**

### **Capacity**

- 6 patients can be served with injection at 1 hour period
- They can be accommodate with their attenders with the social distancing
- Injection OT will function for the whole day up to 4 pm.

### **Injection Team**

- To verify by asking patient if he/she has any travel history.
- Any symptoms like fever, cough, breathing problems to be asked.
- Whether patient has signed covid 19 form at the registration counter.
- Only one attendant to be allowed with the patient.
- In case of redness/discharge noted before start, procedure to be deferred.
- To make it sure patient is wearing masks and has washed hands.
- Minimum touch policy to be followed strictly.
- Proper counselling of patient to be done after the end of procedure.

### **Cleaning Protocol**

- OT cleaning protocol will be followed
- Cleaning of all furniture once every 3 hours
- Syringes drape to be properly disposed in the respective dustbins.

### **PPE**

- Doctor to wear mask, gloves and face shield.
- MLOPs to wear gloves, masks, face shield.
- Patient to wear face mask at all times.

## **Charting area (207)**

### **Capacity**

- Junior fellows(2nd and 1st semester) will perform the charting
- At a time 2 patient can accommodate with 2 attenders in charting area

### **Cleaning Protocol**

- Slit lamp cleaning with Auro rub and patient table cleaning with Lyzol
- Using hand rub for each patient touch

### **PPE**

- Doctor to wear mask, gloves and face shield.
- MLOPs to wear gloves, masks, face shield.
- Patient to wear face mask at all times.

## **Counselling (208, 210 B)**

### **Capacity**

- At a time 7 patients with one attender can wait in the investigation counseling area
- At a time 5 patients with one attender can wait in the Surgery counselling area
- To verify by asking patient if he/she has any travel history.
- Any symptoms like fever, cough, breathing problems to be asked.
- Whether patient has signed covid 19 form at the registration counter.
- Only one attendant to be allowed with the patient.

### **Cleaning protocol**

- Cleaning of all furniture once every 3 hours

### **PPE:**

- Patient to wear face mask at all times
- MLOPs to wear mask and face shield



## **Cross referral criteria**

### **Definite referrals**

- Retinal detachments(Rhegmatogenous/Exudative/Tractional)
- Acute history of Flashes or Floaters(not for single floater)
- Sudden loss of vision with suspicion of macular pathology
- CRAO
- CRVO
- BRVO with CME
- Post-operative CME
- Severe NPDR
- PDR
- Any DR with CSME and vision loss
- Vitreous Hemorrhage
- Vasculitis
- Vitritis
- Suspected Endophthalmitis
- PCV
- CNVM
- Neovascular Glaucoma
- Any VR surgery with silicon oil in SITU
- Re Retinal detachments
- Macular hole
- Epiretinal membranes with vision loss or symptoms of metamorphosia
- Choroid detachments
- Open globe injury
- Closed globe injury for indentation and peripheral screening

### **Note**

For any other doubtful diagnosis call any vitreo retinal consultant and ask for his/her opinion before sending referral.

## **Conditions not to be referred to the Retina Clinic**

### **High myopia**

All high myopias (including pediatric age group) peripheral screening to be done in the respective clinics and only treatable lesions to be referred

### **Retinal degeneration/dystrophies**

To be seen in the respective clinics, visual prognosis to be explained and asked to review after 6 months.

### **Macular scar (patients with vision loss for more than a year):**

Visual prognosis to be explained and patient asked to review after 6 months.

### **Heredo Macular Degeneration**

(Stargardt's dystrophy, Best dystrophy) – Visual prognosis explained and patient asked for review after 6 months.

### **FR Dull**

Referrals to be avoided unless vision loss is acute and referring doctor suspects macular pathology

### **Vision loss not correlating with cataract**

Referrals to be avoided if the patient's loss of vision is chronic or amblyopia is suspected.

### **IJT**

If referring doctor is confident that IJT is quiescent, vision is stable as last visit, patient is asymptomatic, and patient can be asked to review after 3 months.

### **NPDR**

All patients with Mild or Moderate NPDR without Central involving macular edema and 6/6 vision can be asked review after 6 months with strict systemic control.

### **Lasered PDR**

All PDR post PRP patients with no complaints and stable vision can be seen in respective clinics and asked to review after 6 months with strict systemic control.

### **RVO**

Any fresh RVO without CME and vision 6/6 can be asked to get systemic blood investigations and review after 1 month in Retina Clinic

**Lasered RVO**

Any old RVO post sectoral PRP and no CME and stable vision can be asked to review after 6 months with strict systemic control.

**Dry ARMD**

Dry ARMD with drusens, with 6/6 vision and no active CNVM can be asked to review after 6 months, warning symptoms of CNVM should be explained and oral anti-oxidants can be prescribed.

**Posts or patients**

If vision is stable since last visit and retina is attached the patients can be seen in respective clinics and asked to review in Retina clinic after 6 months.

**Aphakia patients**

Surgical aphakia, periphery to be screened and patient asked to refer in Retina clinic after 1 month to plan for SFIOL

# **STANDARD OPERATING PROCEDURE FOR CORNEA SERVICES**

## **Registration, Refraction and Investigation Area**

- Temperature screening and triage of patients are done at the entrance of the hospital and patients with conjunctivitis, fever will be disposed at that point itself.
- 75 percent of patients coming to cornea department will not have an attender with them.
- Cases that need not be sent to cornea department can be disposed in the units. According to the December 2019 data 37 percent of patients coming to cornea clinic are cross referrals from other clinics. A list of cases has been put up the units to prevent unnecessary cross referral.
- The doors and windows of the department will remain open with the air conditioner working to enhance air circulation in the department.
- In case of vulnerable patients 1 attender will be allowed with the patient. Masks will be compulsory for both.
- Cornea clinic registration, refraction and investigation area share the same space for patient waiting and there is a possibility for crowding on that area. Only vision will be checked first and sent directly to the preliminary doctor. Refraction can be done if suggested by the doctor.
- A total of 16 people can be accommodated at a time in the area after taking social distancing into account
- All sisters must wear masks and gloves to be worn by MRD sister for cash collection. The sisters and doctors will not be handling the patient id cards to reduce chances of transmission of infection.
- Regular cleaning of chairs and desks to be done every 2 hours and a record will be kept of the same which will be monitored by the cornea medical officers by the end of the day and filed. Refraction trial set lenses which were used will be cleaned after every patient.
- NCT machine will not be used to prevent chances of transmission. For the same reason confocal microscopy also will not be used during the duration of this pandemic.
- The other equipment's in this area like pentacam , dry eye machine and specular microscopy will be used sparingly for necessary patients and will be cleaned following use after every patient with handrub.

## **Counselling**

- The counselling area can seat 2 patients at a time. The counsellors will be wearing masks while explaining the surgery details to the patient. At present only urgent or emergency surgeries are being advised by the medical officers.

## **OPD**

- 11 doctors can be accommodated in the cornea clinic in 10 cubicles. 1 cubicle has an extra slit lamp.
- The senior fellows will be given authority to examine and appropriately treat patients. MO opinions can be obtained if required. Dilatation will be avoided as much as possible.
- Hand washing or use of hand rub to be done after seeing each patient and the slit lamp will be cleaned by the MLOPS following each patient.
- Cornea department has 9 medical officers excluding Prajna Sir and MS Sir and 10 fellows. Surplus doctors can be accommodated in the units if needed.
- Doctors will be provided with face shield and gloves and masks. The slit lamps have all been equipped with a shield for safety of both the patients and doctors.
- The cornea doctors waiting area can accommodate around 32 people at a time.
- This calculation does not take the Lasik waiting area with a seating capacity for 12 people into consideration which can be used as attenders waiting area.
- Only cases which are urgent or emergencies will be advised surgery by the medical officers during this time. Cases requiring corneal transplant will be done if corneal buttons are available or once cornea retrieval is restarted by the institution at homes and hospitals.
- Lasik will be started when the institution decides with appropriate safeguards. A separate SOP for Lasik has been prepared.
- The biomedical waste generated during the course of the day will be cleaned at the end of the day by cleaning staff wearing appropriate PPE.

## **Investigations**

- Investigations done in cornea clinic include scraping, NCT, RBS, DUCT, topography, asoct, specular microscopy, and confocal microscopy.
- Corneal scraping will be done by fellows wearing appropriate PPEs. The instruments used will be autoclaved in the OT after each use.
- Nct, duct, confocal microscopy will not be performed as mentioned previously to reduce chances of covid transmission.
- The fellows and MOs will be instructed to ask for only necessary investigations to prevent crowding.

# **STANDARD OPERATING PROCEDURES FOR ORBIT OCULOPLASTY, OCULAR ONCOLOGY & OCULAR PROSTHETICS SERVICES**

## **General Instructions**

- All staff must wear the PPE recommended for their patient care role according to the risk stratification
- Social distancing norms must like alternate seating should be followed at all stations
- Patient and attender(SOS) have to wear face mask inside the hospital at all times
- Slit lamps should have the guard and to be sanitized after every patient
- Cleaning of all furniture once every 3 hours. Checklist to be maintained and inspected tice daily by clinic coordinator/ M.O. without fail.
- Keep windows and doors to remain open, keeping the area well ventilated
- Biomedical waste management to be followed as per HIC protocols and in accordance with COVID guidelines established at the hospital.

## **Registration Area**

- 1 attender per patient will be allowed into clinic only for paediatric and vulnerable patients (>65 years of age/wheelchair bound/non-ambulatory)
- At a time 14 patients/attenders can be accommodated in reception area with social distancing. Adequately aerated area with open windows.
- Announcement system will be used to call the patients
- Every patient entering the clinic will be asked to sanitize his/her hands with a hand sanitizer at the registration counter
- The MRD sister will register patients and one Senior MLOP will segregate patients according to the presenting complaints
- MRD sister to be equipped with a mask, unsterile gloves and sanitize her hands in between every patient

## **Refraction**

- Part of Reception area allotted to patients waiting for refraction i.e. 8 patients at a time
- There are 2 refraction cubicles which can accommodate 1 patient at a time.
- In an hour, keeping in mind cleaning of equipment, movement of patients, additional investigation (CV, CF) with the time taken for refraction 4 patients can be seen in an hour in every cubicle. Hence 8 patients in an hour can be accommodated.

## **OPD:**

### **Dacryology unit (SOT):**

- Expected to handle 30-45 patients/day i.e. 5-6 patients/hour
- The SOT (waiting area outside and theatre room inside) will be used as the Dacryology unit. SOT to function with airconditioning unit on and the door close to the area with the exhaustfan open.
- All patients with complaints of watering/ review cases of Dacryology will be segregated at the Registration area itself by the senior MLOP and sent to the Dacryology unit.
- There will be one MLOP (escorting only) and 2 Doctors posted in the dacryology unit at a time.
- The MLOP posted will be equipped with a face shield, N95 mask, scrubs and Sterile gloves (sanitized with handrub between every patient).
- Unidirectional flow of patients will be followed at all times. Once the patient has been sent to the dacryology unit they will wait in the In-time waiting area (seating capacity 6) till they are called into the examination area.
- At the examination area the doctor will complete history taking, examination and advise syringing (SOS).
- The patients requiring syringing will be escorted to the theatre ( 2 tables – 1 to be used at a time alternatively and table head cleaned after every patient). Syringing will be done by the doctor posted under universal precautions.
- After completion of the same the patient will come out into the consultation cubicle and finals will be completed.
- The patient will be asked to wait in the area just outside the SOT till the prescription can be printed and handed over to the patient. The Dacryology out waiting area can accomodate 2 patients at a time.
- The Doctor doing the consultations i.e. History taking and examination with EMR entry will be equipped with a nosterile surgical gown, face shield, N95 mask and Sterile Gloves (sanitized with handrub between every patient). Gown and Gloves to be changed once in 3 hours/ after 10 patients.
- The Doctor posted for Syringing will adorn gear used for maintaining universal precautions ( Disposable cap, Mask with eye shield, nonporous disposable gown, disposable foot protection ) over which a surgical gown will be worn. The surgical gown will be changed every two hours. The doctor will wear double gloves and maintain universal precautions at all times while inside the cubicle for syringing. Gloves will be sanitized with handrub after every patient and changed every two hours.
- Waste will be segregated as per the HIC guidelines. Emptied out every hour.

## **Investigations**

- The MLOP at the registration desk segregating patients will hand over the nondacryology cases to the MLOP posted in the investigation area.
- The cases will be segregated according the complaints ( O1-O4)
- Accordingly relevant investigations i.e. BP, CV, CF will be done
- The Color Vision and BP will be checked in the Investigation area. BP only for indicated patients and Sphygnomanometer to be sanitized after every reading. One patient at a time will be allowed inside the cubicle. The MLOP posted will be equipped with a face-shield, mask and unsterile gloves. Hands to be sanitized after every patient. Face shield to be sanitized every 3 hours.
- The central fields will be checked in the refraction cubicle 1.
- After completion of the investigations the route slip will be handed over to the Senior MLOP for distribution amongst doctors depending upon caterogy and seniority.
- The senior MLOP will escort the patients depending upon the categorization to the relevant waiting area( Doctor area- 1 or 2)

## **Doctor Area -1**

- Once the doctor verifies the case categorization, investigations completed and assesses the report in the EMR then patient alone will be called for doctor consultation.
- In the doctor area -1 a medical officer will be posted for disposing the cases requiring minimal investigation/ conservative management at the earliest in order to decrease patient waiting time in the OPD.
- Slit lamp is available in this cubicle. MLOP to clean slit-lamp before and after completion of examination, for every patient, with alcohol swabs. Windows to remain open for areation.
- Lens to be cleaned thoroughly in sodium hypochlorite and distilled water after examining the patient.
- Minimize pupillary dilatation and undilated fundus examination to be done instead unless deemed an emergency.
- Patient waiting area for these patients can accomodate 22 patients while maintaining social distancing. The area has one wall with open windows for areation.
- Most patients seen in the area are expected to be sent out of the clinic without further investigations/ counselling.
- Expected turnover would be about 6-7 patients per hour in this area.



## **Doctor Area -2**

- After completion of the investigations the route slip will be handed over to the Senior MLOP for distribution amongst doctors depending upon category and seniority.
- Orbit, Oncology, oculoplasty cases requiring intervention and emergency cases requiring detailed examination will be escorted to the doctor waiting area -2.
- Patients coming for the prosthetic clinic will be sent to the prosthetic waiting area and be seen by the doctor posted in the fourth cubicle only.
- All emergency cases/ infants / trauma cases will be seen by the medical officer posted in cubicle 3. They will be directly escorted after vision assessment into the doctor area-2 by the MLOP and given preference for an expedited examination.
- Once the doctor verifies the case categorization, investigations are completed and assesses the report in the EMR then the patient alone will be called for doctor consultation.
- All Medical officers and Senior fellows will do the final consultation and no entertainment of preliminary and final separately.
- In case of any doubt the patient is not to be shifted from the cubicle. The doctor may ask the medical officer posted in the doctor area -2 for a consultation. But these are to be minimized as much as possible.
- To minimize contact procedures during consultation (Proptometry, Auscultation, Ptosis measurement). Equipment used to be cleaned with hand rub after every use.
- Four cubicles are there in this area with air flow and windows. These will be used for consultation.
- Two cubicles without airflow will be converted into an extra waiting area in case of attenders for the consultation or counselling. But these are to be used only if the ventilated waiting area is full.
- 8-10 patients per hour can be seen in this area.

## **Guidelines for Prosthetics Department**

- At a time 2 patients can be accommodated in CFP waiting area
- Only fitting of a stock shells and CFP polishing i.e. Procedure requiring minimal contact with the patient are going to be performed.
- 4-5 patients can be seen in an hour.
- The MLOP and doctor tending to the patient need to ensure adequate precautions are taken to minimize close contact with the patients.
- MLOP in the prosthetic clinic to wear face-shield, mask and gloves.
- All used prosthesis to be washed in soapy water before polishing/ fitting.

### **Counselling**

- One cubicle for counselling with waiting area capacity for accommodating 6 patients waiting for the same.
- Doctors try to maximize explanation of a patient's clinical status and need for intervention with a brief description of the type of intervention and probable timing of surgery and follow up details so that the load on the counsellor is reduced.
- At a time one patient with one attender can wait in the counselling cubicle.
- Approximately 4 patients can be counselled in an hour.

### **Outflow**

- MRD sister at the registration area to keep a check on outflow of patients to keep a live record of the number of patients in the clinic at a given time.
- Out time to be mentioned on the route slip by the MLOP escorting the patient out. This is to be checked and ensured by the MRD sister for every patient leaving the clinic.
- In case of enquiry from the main registration (ground floor) the exact number of patients in the clinic at a time has to be maintained for smooth patient flow throughout the hospital.

### **General Guidelines for Doctors**

- All doctors need to verify / document and ensure that the following are followed for each patient seen by her/him.
- To make sure the patient is wearing a mask and oral confirmation of the patient having washed his hands before entering the hospital.
- To verify by asking a patient if he/she has any travel history or history of exposure to a COVID positive patient- ensure that the COVID-19 form has been filled at the registration counter and scanned in the EMR.
- Any symptoms like fever, cough, breathing problem to be asked for and documented.
- Doctor to wear a mask, unsterile gloves and a face-shield.
- To sanitize hands after every patient.
- Ensure social distancing is followed at all times except during examination which should be done with as much precaution as possible.

### **General Guidelines for MLOPS**

- To make sure the patient is wearing a mask and oral confirmation of the patient having washed his hands before entering the hospital.
- To sanitize hands after contact with every patient or every half an hour.
- MLOP to wear unsterile gloves, masks at all times and face shields at required stations where close contact with patients is expected (MRD sister, Dacryology unit, Refraction, Investigation, prosthetics clinic).
- To refrain from unnecessary contact with any patient/ attenders unless necessary.
- Ensure social distancing is followed at all times within the department as much as possible.
- To keep an eye out for any patients not following instructions and to bring this to the notice of senior MLOP/Doctor in the clinic for ensuring safety precautions are followed by all.