

STRATEGIES FOR SAFE PATIENT EVALUATION AND MANAGEMENT DURING COVID-19 PANDEMIC AT A TERTIARY CARE DEPARTMENT OF OTORHINOLARYNGOLOGY – HEAD NECK SURGERY: POST LOCKDOWN SCENARIO

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Abstract

Pandemic caused by Corona virus (COVID-19) is rapidly affecting the delivery of health care, around the world. Otolaryngologist, would be one of the most vulnerable specialist for exposure to this disease, in post lockdown scenario, when restriction for travel are lifted off and ENT OPDs once again buzzing with patients.

We have written this commentary to facilitate departments of ENT/ Otolaryngologist, in formulating protocols for patient management which is safe for the patient as well as for their team and institution.

Keywords: COVID-19, Post lockdown, Otolaryngologist, protocol,

Introduction

Coronavirus disease 2019 (COVID-19) is a highly contagious respiratory tract infection caused by newly emergent coronavirus, that emerged from city of Wuhan, China, and since then has spread across all countries.^[1] Due to its infectivity and non-availability of any definitive treatment against COVID-19 infection till now, makes it a difficult and alarming proposition and we are only left with various guidelines, protocols and advisories to contain it.

As Otolaryngologists, we may not be in frontline of management of COVID patients, but as the COVID -19 cases starts to plateau across the country, and the country exits from the lockdown, there will be resumption of OPD services. ENT OPDs will be flooded with patients who may be

non-confirmed COVID-19 carriers, both symptomatic and asymptomatic. The chances of medical staff getting infected would then be rather high and this can have devastating affect over the medical system.

As Otolaryngologists, our practice includes clientele presenting with varied disease ranging from simple infective upper aerodigestive tract (UADT) conditions to various benign and malignant conditions of UADT, apart from routine cases of Otology and Rhinology. Evaluation of all our cases requires us to be in close proximity to the patient, and in most cases requires endoscopy of UADT (nose, nasopharynx, oropharynx, larynx and hypopharynx) in OPD as diagnostic and/or therapeutic procedure. This makes Otolaryngologist and paramedics vulnerable to aerosols generated during all these procedure.^[2]

Apart of routine OPD, many patients with growth in upper airway presents with acute upper airway obstruction, which would entail, performing emergency tracheostomy as a lifesaving procedure. We may also be required to perform more tracheostomies in COVID-19 patient who warrants prolonged ventilator support. Tracheostomy is considered as one of the most aerosol generating procedure.^[3]

In view of lack of any definitive treatment, corona virus will continue to remain in population. To ensure safety of patients and staff, various modifications would have to be made over the traditional ways from OPD evaluation to inpatient care. We would have to adjust to so called 'New Normal'.

With above objective in mind, we at a tertiary care ENT department, have formulated protocol / standing operating procedure (SOP) for safe ENT practice at our center. This can be used as template and suitably modified by other institutes according to their working environment and needs.

Protocols

A. Screening and Triage:

- It is recommended that all patients reporting to the institute should be first screened at a designated Flu clinic.
- Patients deemed to be free of symptoms of active COVID-19, would be allowed to proceed for specialty OPDs.

B. OPD registration:

- Our institute has devised a system to give limited prior appointments for OPDs via our Institutional website, through central helpline, departmental reception number.
- Telephonic consultation is encouraged and all chronic or follow up patients on regular medication has been advised to telephonically consult with the specialist for updating about their health, continuation or slight modification in prescription. This will prevent crowding in OPD complex.^[4]

C. Screening of patients at ENT OPD:

- We recommend, repeat screening to be done by trained paramedic, who will check for clearance provided by Flu clinic.
- All high risk patients, as per prevailing guidelines would be referred back to Flu clinic.^[5]
- Large placards has been displayed in and around OPD complex explaining Dos and Don'ts, precautionary measures with special emphasis to wear mask, and maintain physical distancing at all times. Circles has

been drawn in the waiting area with sufficient space from each other.

- Personal details of each patient with their address and mobile numbers will be noted. This will come handy if any patient needs to be traced for contact surveillance.
 - Patients would be asked to wash their hands or use sanitizers properly before entering the OPD complex.
- #### **D. Face to face consultation:**
- Our department has multiple specialists and residents. However, to avoid exposing entire staff, it has been decided that one specialist will see the OPD. He will be assisted by one resident, one operating room assistant (ORA) and one paramedic on weekly basis.
 - Designated team for the week will don appropriate personal protective equipment (PPE) or modified PPE with special emphasis to face mask (preferably N95 or FFP3) and face shield to protect from aerosols, which is a very common phenomenon in ENT practice.^[6]
 - Limited OPD consultancy rooms to be utilized for consultation, preferably which has adequate ventilation.
 - Office endoscopies for diagnostic / therapeutic purposes will be kept minimum to avoid aerosol generation during procedure, however comprehensive evaluation would not be compromised. Such endoscopies which were earlier performed in OPD chambers will be done in minor operation theatre or endoscopy suite located in OPD complex.^{[2][4]}
 - Once the OPD is over the entire OPD complex will be sanitized or fumigated, with

special emphasis on cleaning of door knobs and furniture.

E. Inpatient care:

- To avoid overcrowding in wards and overwhelming the hospital services, all non-essential, non-urgent cases, who can be managed by domiciliary care, after OPD treatment, will not be admitted.^[4]
- All patients warranting inpatient care will be advised to strictly follow prevailing protocols against COVID infection.
- In case of emergency / semi emergency (ex: urgent head and neck cases, paediatric airway cases, uncontrolled epistaxis) would be admitted and managed accordingly.^[6]
- Expeditious discharge will be planned once the patient is stabilized and deemed fit for discharge/ fit for domiciliary care.

F. Surgery:

- In order to avoid unnecessary exposure to staff, and to reduce the burden on the hospital, elective surgeries should will be restricted to minimum.
- Many elective surgeries in ENT, like tympanoplasty, septoplasty, endoscopic sinus surgery, benign diseases of head and neck which are non-life threatening and can be safely postponed. This will protect individual from chances of exposure to virus in a hospital setting. This will also make available beds for urgent cases.^{[4][6]} In case patient is admitted for planned surgery (ex Head neck malignancies) would undergo COVID test by RT-PCR. Surgery would be scheduled only if the patient is negative, barring life threatening emergencies.
- Careful prioritization of elective cases for

surgery would be required. Each case will be discussed in the departmental audit even before giving the appointment. Patients will be designated as per proposed priority list.(Table 1)

Table 1: Priority wise example of cases that may be accepted for definitive surgical management

List of cases that may be accepted for definitive surgical management		
Priority I (surgery mandatory)	Priority II (surgery may be considered)	Priority III (surgery may be delayed)
1. Malignancy cases of Head- Neck region, specifically early malignancy cases where prognosis is good.	1. Complicated chronic otitis media	1. COM mucosal cases
2. Direct laryngoscopy/ Evaluation under anesthesia for biopsy and mapping of disease.	2. Squamous chronic otitis media	2. Nasal masses / Nasal Polyp
3. All life threatening cases:	3. Complicated Sinusitis	3. Benign non life threatening Head Neck tumours.
a. Patient in Stridor	4. Non life threatening cases of maxillofacial trauma	4. Routine ENT cases: Ex Septoplasty/ Tympanoplasty etc
b. Foreign body Bronchus		
c. Deep Neck space abscess		
d. Uncontrolled epistaxis		
e. Tracheostomy		
f. Airway surgeries		
g. Any other life threatening cases		

- Surgeries on COVID positive patients will be postponed till RT-PCR is negative, unless it's a life threatening emergency.^[2]
- Most elective ENT procedures are clinically suitable to be performed as day care case. Day care surgeries would be encouraged. This will avoid unnecessary admissions, free up beds for urgent cases, avoid exposure to patient during hospital stay. However if there is surge in number of cases, all day care surgeries can be cancelled.^{[4][5]}
- Only one surgical team, preferably same team designated team for OPD for the week

should operate, hence list should be planned accordingly. Minimum ORA to be involved in each surgery. Operating team will operate after donning PPE.^[2]

- In case the patient is to be operated under general anesthesia, operating team would remain out of Operation theatre to avoid exposure to aerosol generated during intubation.
- In case of life threatening emergencies like stridor, airway foreign bodies, deep neck space infections, epistaxis surgery / procedure will be performed by taking all due personal protection as per protocol. Patient will then be admitted in a designated isolation ward for observation and RT-PCR COVID test will be done. Patient will be shifted to regular wards only after confirmation of COVID-19 negative status
- In an unfortunate situation the team is exposed to COVID positive patient, the team would be quarantined and undergo testing as per prevailing protocols.
- Consent: A well framed consent apart from routine consent for surgery, will be discussed with patient and relatives covering a clear statement that hospital authorities as well as health care providers will not be responsible for the risk of COVID-19 exposure and the potential consequences.^{[4][5]}
- Unprotected personnel will not be allowed in OT room, where an aerosol-generating procedure is being or has been conducted.^[2]

The protocol proposed is no way exhaustive and due to paucity of space, readers are encouraged to refer guidelines pertaining to specific ENT surgeries issued by National Health Services (NHS), UK and Associations of Otolaryngologists

of India (AOI) and general advisories by health council which are updated time to time.

Conclusion

COVID-19 pandemic is going to stay, till definitive treatment is developed. Otolaryngologists and other clinicians will have to tune themselves to work according to this new normal condition in post lockdown scenario. These protocols will act as a template for guiding practicing ENT specialists at tertiary care centres to adapt themselves in providing best medical care to their patients without compromising safety of self and their staff.

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