GUIDELINES FOR THE PROVISION OF EAR, NOSE AND THROAT SERVICES DURING COVID-19

Version 1

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1. BACKGROUND

Corona Virus (COVID-19) is a novel disease that has manifested globally and is thought to have spread from animal species to humans. COVID-19 is understood to be spreading from human to human through droplets (coughing and sneezing) and through direct contact with contaminated surfaces or hands. Symptoms usually appear two (2) to fourteen (14) days after exposure. Safeguards to prevent the spread of COVID-19 include, wearing masks, maintain physical distance of 2 meters, avoid sneezing in the open, touching the face by hand, avoiding direct contact (handshaking) with other people and not travelling to locations where the virus is prevalent.

DHA has developed this document which recommends measures to be taken to protect the patients, staff and healthcare professionals providing Ear Nose Throat (ENT) services from COVID-19, as health facilities re-engage in providing routine care.

2. PURPOSE

2.1. This document provides guidance on the following:

2.1.1. Reducing health facility risk of aerosol transmission.

2.1.2. Protecting healthcare professionals, staff and patients.

2.1.3. Implementing adequate infection control measures.

2.1.4. Managing ENT patients safely.

3. APPLICABILITY

3.1. All DHA Licensed healthcare services providing ENT services during COVID-19 in the Emirate of Dubai.

4. RECOMMENDATIONS AND PRECAUTIONS

Health facilities providing Ear, Nose and Throat (ENT) services during the COVID-19 pandemic should adhere to the following recommendations:

RECOMMENDATION 1: PERMITTED SCOPE OF SERVICES

4.1. Health facilities providing ENT services during the COVID-19 pandemic shall abide by the following scope of services until further notice is issued by DHA:

4.1.1. Following assessment, provision of ENT care is permitted for urgent and emergency cases only, including but not limited to the following:

a. Emergency Cases

I. Obligatory inpatient emergency admissions.

II. Non-operative emergencies e.g. epistaxis, trauma and injuries, peritonsillar abscess and epiglottitis.

b. Urgent and semi-urgent cases: especially where procedures are non-aerosol generating in nature (e.g. urgent head and neck cancers, pediatric airway cases, cholesteatomas, sudden loss of hearing, bloody discharge, severe vertigo, Bell's palsy).

i. Cases where a patient is in pain or significant distress.

ii. Any other case which is deemed necessary by the physician's phone triage.

c. Offer clinic visit if patients at risk for significant negative outcomes without on-site evaluation. Only patients who need a thorough head and neck examination should be seen in person.

d. All other elective appointments should be manage through tele-health or postponed as a precaution to avoid transmission of COVID-19.

i. Conduct initial telephone consultation about any new or concerning signs or symptoms suggesting disease recurrence, new or pending issues (e.g. severe dysphagia or airway compromise, current symptoms suggestive of COVID-19).

RECOMMENDATION 2: PROTOCOLS

4.2. ENT clinics should have in place protocols for the following:

4.2.1. Assessment, triage, scheduling appointments, treatment of emergency and urgent patients and follow up and transportation.

4.2.2. Protocols to reinforce awareness and educate clinical staff and patients.

4.2.3. Tele-health to minimize patient contact and to provide advice, self-management, prescribing analgesics and/or antibiotics, booking in emergency and urgent care or referral.

4.2.4. Patient flow in and out of the clinic or hospital.

4.2.5. Donning and doffing of Personal Protective Equipment (PPE).

4.2.6. Infection control, sanitation and decontamination procedures related to COVID-19.

RECOMMENDATION 3: MANAGING EMERGENCY AND URGENT PATIENTS

4.3. Emergency and urgent patients should be booked through an appointment.

4.3.1. Prior to arrival, all patients should be screened for COVID-19 (**Appendix 1**).

4.3.2. Ensure at least twenty (20) minutes interval is maintained between appointments.

4.3.3. Ensure only one patient is permitted into the practice (or clinic) per ENT physician at a time.

4.3.4. Patient temperature should be checked upon arrival at the clinic.

4.3.5. Ensure two (2) meters of patient distancing is practiced at the reception and waiting area.

4.3.6. Children under the age of eighteen (18) years may be accompanied by an adult from the same household.

RECOMMENDATION 4: INFECTION CONTROL AND HYGIENE PRECAUTIONS

4.4. Front desk and clinical staff should adhere to Personal Protective Equipment (PPE).

4.4.1. Face masks, gloves should be worn by staff at the reception.

a. Two (2) meters distance should be practiced when communicating with the reception.

b. Shielding may be used between patients and reception staff.

4.4.2. Ensure all staff wear PPE and perform hand hygiene as follows:

a. Entering the workplace.

b. Before and after patient contact.

c. After contact with contaminated surfaces or equipment.

d. After removing PPE.

4.4.3. The ENT physician should wear appropriate PPE during treatment e.g. gloves, gowns, caps, N95 masks and face shield. For in-depth PPE requirement refer to (**Appendix 2**).

4.4.4. Remove objects like remote control or other communal objects in the patient waiting area.

4.4.5. Regularly clean and disinfect seats and tables at the patient reception waiting area.

4.4.6. Hand sanitizers, gloves and mask should be made available for use by anyone entering the clinic at the entrance of the clinic or reception desk.

4.4.7. Promote coughing or sneezing etiquettes.

4.4.8. Toilets should be cleaned with disinfectants on a regular basis.

4.4.9. Hand rails and door handles must be disinfected at regular intervals.

4.4.10. Use single consultation/treatment room that is closed.

4.4.11. Keep staff level in the consultation/treatment room to the minimum required.

4.4.12. Limit paperwork in the consultation/treatment room.

4.4.13. Cover the keyboard of computers with disposable, flexible clear barrier (e.g. plastic wrap) and change between patients.

4.4.14. Ensure treatment chair and tools are sanitized and disinfected before and after each patient.

a. Disposable consumables should be used to avoid contamination.

b. Clean and disinfect all the surfaces in the consultation/treatment room after each patient wearing gloves, mask and face shield.

i. If surfaces are dirty, they should be cleaned using soap and water prior to disinfection.

c. Dispose the surface barriers after each patient.

d. Clean and disinfect public areas frequently, including elevators door handles/knobs, light switches, chairs, desks and bathrooms.

e. Provide tissues, alcohol based hand rubs, soap at sinks and trash cans, where appropriate.

4.4.15. Room pressurization should be maintained as per setting.

a. ENT treatment rooms are typically positively pressurized.

b. Negative pressure rooms are not required unless aerosol generating procedures or anticipating these procedures.

c. Treatment rooms designated for managing contagious disease cases and to prevent spread into other rooms should be negatively pressurized.

d. HEPA filters used, should be changed as per manufacture guidelines.

4.4.16. Ensure all medical waste is disposed as per Dubai Municipality requirements.

4.4.17. Make use of Dubai Municipality approved providers for sanitation and disinfection if this cannot be done by the clinic.

RECOMMENDATION 5: TREATMENT PRECAUTIONS

4.5. Endoscopic examinations of the mucosa of the Head and Neck

4.5.1. Endoscopic examinations of the nose, sinuses, oropharynx, hypopharynx, and larynx are considered aerosol-generating procedures and examinations should be limited to patients who have a clear emergency and urgent indication and need.

a. In awake patients, adequate topical preparation can be used but sprays should be avoided. Carefully placed pledgets should be used to provide decongestion and anesthesia.

b. Topical anesthesia for any office-based intervention of the larynx under the guidance of a laryngoscope or strobolaryngoscope is performed through application of a spray and is considered high risk; therefore, office-based biopsy, injection, laser, or other procedures should be delayed if possible.

c. If a video screen is available to project the examination, it should be used to keep the patient's and healthcare professionals faces apart.

d. Disposable endoscopes may be considered.

e. After completion of the examination, the endoscope must be appropriately handled. The endoscopes should not be removed from the examination room without a protective cover.

4.6. Intubation and Extubation

4.6.1. It is advisable that during intubation, all nonessential staff leave the room and only return after the airway is secured. All nonessential staff should also exit the room during extubation.

4.6.2. Jet ventilation procedures pose a particularly high risk and should be performed only under absolute necessity and with appropriate PPE, preferably in a negative-pressure room.

4.7. Endoscopic Sinonasal and Skull Base Surgery

4.7.1. Endoscopic nasal operations, including sinus surgery and trans-sphenoidal pituitary surgery are very high-risk procedures. In general, these procedures should be postponed in patients with COVID-19 or those who cannot be tested.

4.8. Thyroidectomy and Neck Procedures

4.8.1. Procedures that do not expose mucosal surfaces are lower risk, with the caveat that the use of energy devices can result in aerosolization of the virus from the bloodstream or other gastrointestinal secretions.

4.9. Ear Surgery

4.9.1. Drilling through the mastoid creates droplets and aerosols in significant clouds that, if the virus is present, could risk infecting everyone in the operating room environment. As contaminated mists harbour viable virus for several hours, especially in enclosed spaces, caution is warranted. Mastoidectomy therefore is considered a high-risk procedure. Ideally, any patient undergoing any ear surgery

should be tested for COVID-19 preoperatively. If a patient is positive, surgery should be delayed until the patient has cleared the disease.

4.10. Management of Facial Trauma

4.10.1. Lacerations that involve mucosal surfaces should be treated as high risk. For injuries that require operative intervention (for example, reduction of fractures), the infection status of the patient should be confirmed first and then definitive treatment initiated if at all possible. In areas with significant shortage of medical capacity and personnel, non-operative approaches should be considered as much as medically acceptable.

4.11. Tracheostomy

4.11.1. In general, most tracheostomy procedures should be avoided or delayed (even beyond 14 days) because of the high infectious risks of the procedure and subsequent care until such time as the acute phase of infection has passed, when the likelihood of recovery is high, and when ventilator weaning has become the primary goal of care. It is therefore recommended as follows:

a. Select the patients carefully. If the tracheostomy is assessed as difficult because of anatomy, history, comorbidities, or other factors, consider postponing the procedure.

b. Consideration may be given to percutaneous dilatational tracheostomy if the patient's anatomy and procedurals' expertise allow it to be done safely

with minimal or no bronchoscopy, endotracheal suctioning, and disruption of the ventilator circuit.

i. Provide adequate sedation including paralysis to eliminate the risk of coughing during the procedure. Ventilation should be paused (apnoea) at end-expiration when the trachea is entered and any time the ventilation circuit is disconnected.

ii. Choose a non-fenestrated, cuffed, tracheostomy tube on the smaller side to make the tracheostomy hole smaller overall (shiley size six (6) for both men and women is adequate). Keep the cuff inflated to limit the spread of virus through the upper airway.

iii. Perform tracheostomy suctioning using a closed suction system with a viral filter.

iv. Use a heat moisture exchanger device instead of tracheostomy collar during weaning to prevent virus spread or reinfection of patients.

v. Avoid changing the tracheostomy tube until viral load is as low as possible.

4.12. Advise patients on pre- and post-operative instructions for patient self-care and management. Instructions should include information and the importance to report any signs and symptoms of COVID-19 to the practice within the next 14-days and to seek medical attention.

REFERENCES

1. American Academy of Otolaryngology- Head and Neck Surgery (2020). Tracheotomy Recommendations during the COVID-19 Pandemic. Available on: https://www.entnet.org/content/tracheotomy-recommendations-during-covid-19-pandemic (accessed 13/05/2020).
2. Babek et al (2020). Safety Recommendations for Evaluation and Surgery of the Head and Neck During the COVID-19 Pandemic. JAMA Otolaryngology–Head & Neck Surgery Special Communication Available on: https://jamanetwork.com/journals/jamaotolaryngology/fullarticle/2764032 (accessed 13/05/2020).
3. Canadian Society of Otolaryngology Head and Neck Surgery (2020). Guidance for Health Care Workers Performing Aerosol Generating Medical Procedures during the COVID-19 Pandemic Endorsed by the CSO-HNS Executive Committee. Available on: https://www.entcanada.org/wp-content/uploads/Protocol-for-COVID-and-AGMP-3-iw-mailer.pdf (accessed 15/05/2020).
4. Cochrane (2020). Coronavirus (COVID-19) Resources. Available on: https://www.cochrane.org/coronavirus-covid-19-cochrane-resources-and-news (accessed 13/05/2020).
5. ENT UK (2020). ENTUK Guidelines for changes in ENT during COVID-19 Pandemic. Available on: https://www.entuk.org/entuk-guidelines-changes-ent-during-covid-19-pandemic (accessed 13/05/2020).

6. Jamal M, Shah M, et al (2020). Overview of transnational recommendations for COVID-19 transmission control in dental care settings. Available at: https://onlinelibrary.wiley.com/doi/pdf/10.1111/odi.13431 (accessed on: 2nd June 2020).

APPENDIX 1: PATIENT SCREENING FORM

Patient Screening Form **Patient Name:** Click or tap here to enter text.	**Pre-Appointment Date:**	**In- Office Date:**
Do you have fever or felt hot or feverish recently (14-21 days)?	☐Yes ☐No	☐Yes ☐No
Do you have shortness of breath or breathing difficulty?	☐Yes ☐No	☐Yes ☐No
Do you have a cough?	☐Yes ☐No	☐Yes ☐No
Do you have any symptoms like gastrointestinal upset, headache or fatigue?	☐Yes ☐No	☐Yes ☐No
Have you experienced recent loss of taste or smell?	☐Yes ☐No	☐Yes ☐No
Are you in contact with a COVID-19 positive patient(s)?	☐Yes ☐No	☐Yes ☐No
Are you above 60 years of age?	☐Yes ☐No	☐Yes ☐No
Do you have heart disease, lung disease, kidney disease, diabetes or any auto-immune disorder?	☐Yes ☐No	☐Yes ☐No
Have you travelled in the past 14 days to any regions affected by COVID-19	☐Yes ☐No	☐Yes ☐No

Note: Positive responses to any of these would likely indicate a deeper discussion with the ENT physician for emergency or urgent treatment.

APPENDIX 2: PPE For Otolaryngology ENT/Procedures - adapted from Canadian Society of Otolaryngology Head and Neck Surgery (2020)

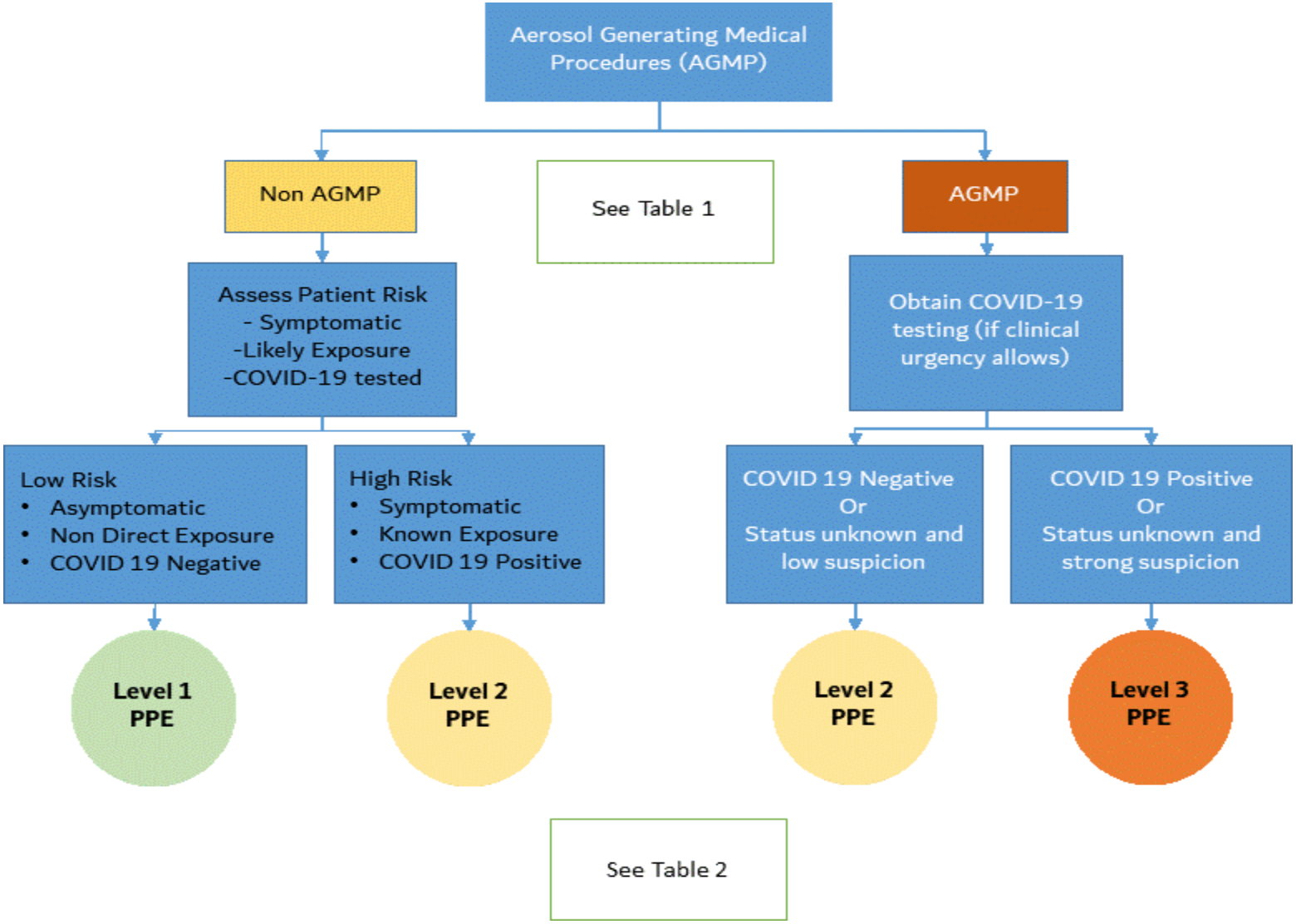

Table 1

Aerosol Generating Medical Procedures (AGMPs) in Otolaryngology/ENT

-Airway procedures (including laryngo-bronchoscopy
-Intra-nasal or sinus surgery (including nasendoscopy)
-Head and neck mucosal surgery (including tracheostomy)
-Mastoid surgery

Table 2

Level 1 PPE	Level 2 PPE	Level 3 PPE
-Surgical Mask -Isolation Gown -Gloves -Eye Protection	-N95 -Disposable fluid repellant gown -gloves -Face shield/goggles -Consider head cover (including neck) and double gloves	-Negative pressure room -Minimum personnel -PAPR or Double disposal fluid repellent gown -Double gloves -N95 or N99 with second surgical mask and attached face shield or goggles