# Continuing The Clincal Services in Otolaryngology , Head & Neck Department in The time Of COVID 19 Pandemic

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### Discussion

Coronavirus disease 2019 (COVID-19) is highly transmittable pathogenic viral infection caused by a novel coronavirus (2019-nCoV) closely related to the Severe Acute Respiratory Syndrome (SARS) and Middle Eastern Respiratory Syndrome (MERS) Coronaviruses. was first identified in Wuhan, Hubei province, China on December 8, 2019. and has rapidly spread around the world causing a global health crisis.

The signs & symptoms of SARS-CoV-2 induced COVID-19 are a bit similar to those seen in other respiratory infections and include the following finding at onset of illness [1, 2, 3] fever (83 % -98.6 %), Dry cough (59.4-82) & fatigue, myalgia "(muscle pain) (69.6 \% -44 \%) with less common symptoms headache (8%), sore throat (5%) & diarrhea (3%)

Until presently there are no safe promising clinical treatments, no vaccine or documented anti COVID 19 drugs are validated to develop efficient therapeutic strategies except for Remdesivir, in addition favipiravir & combination therapy with hydroxychloroquine plus azithromycin which all been evaluated against COVID-19 in clinical trials, resulted in clinical recovery [4]

The World Health Organization had declared the outbreak to be Public Health emergency of international concern on 30 January 2020 and as the cases spread from Wuhan, throughout China and into other countries. The first case of 2019-20 corona virus was confirmed to have reached Bahrain in February 21st 2020, substantially followed by Saudi Arabia in March 2nd 2020, soon after on march 11 2020 as the cases surged the world health Organization (WHO) recognized it as pandemic

As COVID-19 began to spread and according to the current evidence [5] the primary method of transmission between people is thought to occur through respiratory droplets and contact routes. In order to protect the health care workers and non-infected patients from potential COVID-19 patients, infection control measures were established in most of institutes especially the ENT departments to minimize the nosocomial spread among the health worker

The strategy for infection control against COVID-19 includes material preparation and distribution upon the availability, triage strategy, training on infection prevention measures, limiting the traffic to the hospital inpatient and outpatient, preparedness for hospital disaster plan and specific disaster plan for each department, emergency expansion plan for the intensive care unit capacity, Preparedness for field medical words and Intensive care unit, etc.

5 days after WHO announced the CoVid 19 pandemic We followed the new policy guidelines by avoiding the grouping so decisions were made regarding departmental meeting including the training activities and journal club to withhold it and transferred into a virtual meeting and internal memo which is distributed through emails till recently To reduce the number of patients' visits in our clinics, in a manner without compromising the patientcare we started using phone call consultation method (figure 1). We offered to refill medication for stable patient's and sending medications using the hospital pharmacy transport service (figure 2)

We confined the appointments for the emergency and the post-operative cases, we Minimize the elderly patients and the patients with comorbidities traffic into the hospital and we restricted the walk-in patients for the clinics for all the consultants.

As well as we follow the policy of separating or distancing the appointment time for the patient presented to the department

We also limited access to the clinics by arranging the following: we started sending List of Outpatients appointments information at least one day in advanced to the Security Gates for allowing only the scheduled patients to enter, then the patient had to pass by two visual triage units one at the hospital entrances and other at the clinic entrance following the score criteria for the COVID-19

After being screened by the triage station the patients were requested to get seated in the Waiting area and the seats arrangements were distant for the safety precautions (figure 3)

In the clinical room, nose and throat examinations were considered to present the highest risk, and additional protective measures were implemented from our side., so all patients have been requested to sit on the nonclinical chair and in case of the condition required clinical examination then they are requested to get seated on the clinical examination chair

On the Ent clinical examination, the threshold for the endoscopic examination of the nose and pharynx have been reduced to the maximum and the personal protective equipment use has been implicated as the rules and hospital guidelines and in case of endoscopic examination needed a local anesthetic spray was replaced by gel anesthesia, and the smallest possible diameter laryngoscope was recommended to reduce sneezing and cough reflexes

Hence the endoscopic procedures are considered an aerosol generating so all surfaces in the clinic room can potentially become contaminated thus we performed an appropriate disinfection between each patients & post the endoscopy procedures

Our department has decided to reschedule and postpone all elective procedures that may aerosolize tissue including tonsillectomy, adenoidectomy Sino-nasal surgery, and other airway procedures. While we agreed that's the otological procedures along with the oncology procedure where continued until further notice for phase 1 emergency response to an outbreak

When a procedure is indicated, appropriate personal protective equipment must be worn including fluidresistant gown, gloves, eye protection, full face shield, fit-tested N95 respirator, head cover, and impermeable shoes that can be disinfected (figure 4)

Inside the operating room we Limited the number of healthcare providers participating in any procedure to only those absolutely necessary.

After surgery we try to minimize the hospital stay postoperatively and trying to discharge the patient same day of the surgery

With fewer cases and clinics, we have begun assigning our staff to attend a comprehensive training and Operational courses to support country preparedness and response to this pandemic as well we encourage them to be involved in research related activities & creating a database for departmental and/or multidisciplinary

## Conclusion

Otolaryngologists have significantly higher risk of SARS-CoV-2 induced COVID-19 than the other specialties and Up to now there is no formal guidance on the best method of reducing the risk of this infection among the heath care workers. Hence no nosocomial infection has occurred at our Hospital, including the ENT department we thought of sharing our experience to assist infection prevention and control teams with setting up precautionary measures in their facilities and to advocate for changes within their hospital systems.

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