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ORIGINAL ARTICLE

Preventing the spread of Coronavirus in ENT unit, our experience

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Abstract
SARS-CoV19 is spreading all over the world starting from China in the end of 2019. This important emergency involved every single aspect of ordinary life. Even hospitals have undergone changes with the aim of ensuring the best care and preventing the spread of the virus. This is a personal contribution to illustrate all the measures put in place to avoid contagion. Although in an ENT unit you have strictly to do with the airway, none of the staff so far has been positive.
Keywords: SARS-CoV19, safety, prevention, ENT, contagion.

1 | INTRODUCTION

SARS-CoV19 spread all over the world originating in China at the end of 2019[1]. By the end of February Italy faced the virus whose outbreak was found in the north of the country (the so-called 'Red Zone') with a strong impact on daily life. From March 8^{th} a series of decrees have gradually extended containment measures to the whole national territory[2]. All the aspects of everyday life have changed: people cannot leave their homes except for real needs. Teleworking has been promoted.

Only few job categories can leave their house, including healthcare professionals.

In addition, hospitals have been subject to a series of changes: all planned surgical procedures have been postponed and only urgent or very important medical examinations are allowed in the whole Italian territory.

For the time being, several hospitals now accept only COVID-19 positive patients to give over intensive care beds for the treatment of patients with this disease.

Other facilities have been identified as 'non-COVID hospitals' in order to accept patients affected by other severe and urgent conditions. Our facility, Hospital Mons. R. Dimiccoli in Barletta, in the south of Italy (Puglia), has been designated as 'non-COVID hospital' because of its oncological vocation. In particular,

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our ENT unit, the only one in the district, needs to maintain its activity, even if for emergency only, in order to take care of patients with (suspected) oncological and respiratory head and neck disease in Covid-19 negative patients. In this situation of emergency, all the staff of our unit have been invited to protect themselves and patients admitted to ENT in order to guarantee best care like ever. Many ideas have been proposed to achieve this goal: this article includes all the measures taken to prevent the spread of COVID-19 in our Hospital and, specifically, in our ENT unit. We hope this can be useful to other colleagues.

2 | OUR EXPERIENCE

First of all, we evaluate the access to the Hospital.

Patients admitted to First Aid are subject to a triple triage: first triage made by auxiliary staff outside the hospital who ask questions about symptomatology: cough, dyspnoea or fever, relation with positive COVID-19 persons. Detection of temperature is performed for each patient.

A second triage is made by nurses with the same protocol.

Finally, a third triage is carried out by a doctor of First Aid with accurate anamnesis, evaluation and medical examination. At the end of this last step, doctors can decide if patients have to undergo to a pharyngeal swab.

It is important to underline that each of these steps is autonomous and not conditioned by the previous one.

Patients who need ENT consultation and admitted from First Aid are evaluated directly in this department by an ENT doctor with disposable medical devices (ear and nose speculum, tongue depressor, portable flexible laryngofiberscope).

For patients who need special procedure (such as ear medication, very difficult foreign bodies extraction), access to ENT department is allowed but only after another triage, made by dedicated personnel through a glass separator wall and a new detection of temperature.

Patients admitted to hospital for urgent care, not First Aid, undergo to a double triage: first triage carried out by nurses at the hospital entrance consisting of questions and registration of temperature

Second triage performed by dedicated personnel at the entrance of ENT ward because of the possibility that in that time clinical situation can change: the ENT department is located on the 5^{th} floor and, in this period, patients prefer to take stairs instead of elevators to arrive at the floor, therefore it is possible to highlight also minimal dyspnoea or other respiratory difficulties. At the end of this triage, patients sign a document in which all the collected questions and vital signs (temperature, oxygen saturation) are reported.

After these evaluations, patients who are accepted to department for medical examination are managed in one special room located near the entrance and separated from other rooms of the ward. In this manner, we create two separate paths. As already said, the only medical examinations performed are urgent and/or oncological examinations and post-surgery evaluations. We schedule date and time of examinations in order to avoid gathering. Also in this context, all the medical devices used are disposable except for laryngofiberscope that is used with a protective sheath. People needing hospitalization undergo to a nasopharyngeal swab (two samples) for COVID-19 before they can have access to department rooms. The procedure is performed by a dedicated doctor in a special area outside the department and separated from the waiting room.

We decided to perform swabs in the nasopharynx, following the guidelines issued by the European Centre for Disease Control and Prevention (ECDC), because of the greater sensitivity of this site[3].Concerning personnel, every single component of the staff adopts IPD (individual protection device) like surgical or FFP2 mask, face shield, gloves and medical gown.

Social distancing rules have been implemented during procedures. Locker rooms have been placed in a different area, based on the daily tasks: we have one team for ward and another one for medical examinations in order to separate ward paths and ambulatory paths.

Because of the reduction of activities, it was possible to create two teams that alternate between work and quarantine at home.

For suspected cases, a separated hospitalization room was settled, in the ambulatory area to prevent contact with other patients. This room is equipped with all the necessary aid for patients, doctors and nurses to guarantee isolation.

We have planned daily simulation for wearing and removing individual protective devices and discuss about organisation in the unlikely event to face a suspected or positive COVID-19 patient and, a second way for access to/exit from the department was identified.

Vital signs such as temperature, oxygen saturation and blood pressure are constantly monitored in hospitalized patients. Several dispensers with disinfectant gel were placed in the ward at the entrance of each recovery room for sanitizing of personnel and patients. Access to the ward was denied to relatives, while taking into account the psychological aspect of patients, a contact by phone was maintained with additional effort by the staff to allow rapid recovery and reduce stress.

We have also established a protocol for external medical consultants: the access to the ward has been allowed for only one doctor, if necessary and, where this is not the case, consultancy by phone is sought.

We continue to organize multidisciplinary teams by videoconference to discuss oncological case and avoid delays in treatment.

A second nasopharyngeal swab or tracheal swab is scheduled for fragile patients or patients who have undergone to a demolitive surgery after 48-72 hours from the first one. Considering the evidence of low sensibility and specificity, we do not perform oropharyngeal swab.

From a surgical point of view, the organisation of intervention depends on the possibility of infection, even if, as we said, all patients admitted to the operating rooms have a negative swab for COVID-19. Following this protocol, patients with a nose or nasopharyngeal mass were admitted for surgery as last in the program.

3 | CONCLUSION

This paper was produced with the intention of sharing our experience in an unprecedented situation of emergency. At the moment, none of us is positive to COVID-19 and we hope we can continue to carry out our commitment to take care of patients. In our opinion what is important is to work in a team, comply with the rules and pay attention during every procedure.

We hope to remain negative to COVID-19 until the end of this emergency.

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