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ESSD commentary on dysphagia management during COVID pandemic

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European Society for Swallowing Disorders

The World Health Organization (WHO) declared the COVID-19 pandemic a Public Health Emergency of international concern [1,2]; experts in swallowing disorders (deglutologists, speech and language pathologists, nurses, physiotherapists, occupational therapists and medical doctors of different disciplines including but not restricted to neurology, otorhinolaryngology, phoniatics, radiology, physical medicine and rehabilitation) are faced with a new situation and are seeking guidance on service delivery and clinical procedures during the COVID-19 pandemic. Several national societies have developed documents to guide clinicians in dysphagia management during the COVID-19 pandemic [3-6]. The European Society for Swallowing Disorders (ESSD) aims to provide considerations based on an evolving body of literature, front-line information from this early stage pandemic and statements from several national and international health care bodies and societies. As the health care emergency is rapidly evolving and subject to change and new information and data will become available, these considerations may require individualization based on region, facility, resources, and patient-specific factors. Each swallowing expert should adhere to his/her own country, regional and facility regulations.

During the COVID-19 pandemic, assessment and treatment of patients with oropharyngeal dysphagia should be provided, while at the same time balancing risk of oropharyngeal complications (aspiration pneumonia, malnutrition) with that of infection of patients and healthcare professionals involved in their management. Regarding COVID-19 infection status, two categories of patients can be considered:

1. COVID-19 positive patients (COVID+ve), confirmed by positive pharyngeal/nasal swab or chest x-ray/CT scan suggesting interstitial pneumonia, or symptoms of COVID-19 infection (in particular cough, fever, dyspnea, anosmia) and contact with a COVID-19+ve or suspected positive patient;
2. COVID-19 negative patients (COVID-ve), confirmed by negative pharyngeal/nasal swab or no symptoms.

Differences exist on the prevalence and management of COVID-19 among countries and areas; there are also differences among countries on how to consider and manage patients without symptoms and those with no contact with COVID+ve patients, as pre-symptomatic and asymptomatic transmission are possible. While in some countries these patients are managed as COVID-ve, in other countries they are considered as potential COVID+ve and managed as such. Country, region and facility regulations should be followed.

Among swallowing experts, there are many questions on dysphagia management during the COVID-19 pandemic.

- 1) When should patients suspected of dysphagia be assessed?

Elective, non-urgent assessment may be temporarily postponed. Assessment procedures are often restricted to patients who are at significant risk of developing dysphagia-related complications (aspiration pneumonia-sepsis, malnutrition) or in cases of dysphagia of unknown origin and risk of life-threatening underlying disease (such as head and neck cancer or neuromuscular disorders). In the case of patients safely receiving sufficient nutrition (oral or via PEG/NGT), the swallowing assessment procedure may be postponed in most cases.



European Society for Swallowing Disorders

Both COVID-ve and COVID+ve patients are triaged to decide whether dysphagia assessment is necessary. Information on patient COVID-19 status and risk of dysphagia complications are obtained via remote systems (phone, email, telepractice) and/or through other colleagues such as nurses.

2) How should patients suspected of having dysphagia be assessed?

In both COVID+ve and COVID-ve patients, assessment procedures aim to estimate the risk of complications. Cough reflex testing, gag testing, voluntary cough, cervical auscultation are avoided in COVID+ve patients.

3) When should instrumental swallowing assessment be performed?

In deciding when instrumental assessment should be performed, swallowing experts should guarantee that the procedure avoids the following:

- a) COVID-19 infection of the examiner
- b) COVID-19 infection of the patient being examined as well as the incoming patients examined using the same instruments and/or in the same environment [7].

Instrumental assessment of swallowing (videofluoroscopic swallow study, fiberoptic endoscopic evaluation of swallowing, manometry) is performed only if cleaning and processing of the instruments can be guaranteed [8-10].

In both COVID+ve and COVID-ve patients, instrumental assessment of swallowing (videofluoroscopic swallow study, fiberoptic endoscopic evaluation of swallowing, manometry) is performed only if a potential life-threatening underlying disease is suspected, clinical assessment has not provided enough diagnostic information for effective treatment to be prescribed to the patients and the clinical situation does not allow the clinical decision to be postponed.

4) How is the expert in swallowing disorders protected?

Assessment and management of oropharyngeal dysphagia is a high-risk situation as it must be considered an aerosol-generating procedure (AGP) [11-13]. Personal protective equipment (PPE) should be used [14,15].

PPE with COVID-ve patients: the expert in swallowing disorders wears protective eyewear, surgical mask and gloves.

PPE with COVID+ve patients: the expert in swallowing disorders should wear FFP2/3 mask, gloves, protective eyewear, water-proof disposable gowns and disposable hairnet. The swallowing expert should be trained in how to use PPE.

In order to minimize the risk of infection, in addition to the use of PPE, the swallowing expert can use additional precautions, if applicable. During assessment/management of patients with oropharyngeal dysphagia:

- voluntary cough should be avoided
- 90 cm distance from the patients should be kept as much as possible



European Society for Swallowing Disorders

- patients are asked to wear mask, where possible, before and during the procedure; patients' hands should be washed before the procedure
- time devoted to assessment and treatment procedures should be restricted as much as possible.

5) How is dysphagia treated during COVID pandemic?

In both COVID+ve and COVID-ve patients, telepractice is encouraged.

In COVID+ve patients:

- compensatory treatments are recommended
- coughing manoeuvres (e.g. super-supraglottic swallow) in presence of the swallowing expert should be avoided
- All AGP procedures such as EMST/IMST and thermotactile stimulation should be avoided
- patient self oral care should be encouraged, as direct oral care by health care personnel is a high risk procedure
- in cases where oral feeding is considered unsafe, a NG tube is placed. PEG placement should be considered only if COVID-19 infection to both the patient and the health care personnel is ruled out.

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European Society for Swallowing Disorders

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European Society for Swallowing Disorders

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