

Speech therapy practice in hospital settings and COVID-19 pandemic

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Dear editor,

Coronavirus disease 2019 (COVID-19), an emerging infectious disease caused by Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2), which is transmitted mainly by droplets and contact, has become a major health problem and resulted in new challenges for healthcare systems worldwide¹. Multidisciplinary teams can play a major role in the management of patients with SARS-CoV-2 infections.

In the hospital setting, speech therapists must be involved in the care of patients with complaints and symptoms related to difficulty in swallowing, regardless of the underlying disease. It is necessary to reflect on the changes and challenges faced by these health professionals during the COVID-19 pandemic. The

challenges with the emergence of COVID-19 include changes in the service schedule, work process, and the physical and organizational structure of the hospital environment.

Patients with severe symptoms associated with SARS-CoV-2 infections may require respiratory support, including endotracheal intubation and mechanical ventilation, and enteral nutrition by tube feeding. It has been reported that critically ill patients with COVID-19 can present severe muscle weakness, impaired mobility, neurological and psychological disorders, dysphagia, and smell and taste dysfunction^{2,3}.

The speech therapy service aims to perform a clinical evaluation of swallowing to determine the risk

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of dysphagia and the safest diet route, in addition to defining the need for instrumental evaluation at the bedside. Preliminary results from a recent clinical study on the swallowing performance and safety of COVID-19 patients suggest fewer rehabilitation sessions to return to safe oral feeding when compared to critical Intensive Care Unit (ICU) patients without COVID-19⁴.

The COVID-19 pandemic also caused limitations in conducting clinical evaluation, as the procedures performed by speech therapists require proximity to the patients' faces and contact with the oral mucosa and body fluids, such as saliva and respiratory droplets⁵. The available evidence recommends avoiding any type of stimulus that may trigger coughing and vomiting reflexes, including areas of the oral cavity, such as the base of the tongue, fauces, uvula, palate, and posterior pharynx wall⁶, in addition to restrictions on the use of cervical auscultation in the assessment of dysphagia⁷.

Instrumental assessment including video-fluoroscopy and endoscopic evaluation of swallowing should only be performed after patients test negative for SARS-CoV-2 infection in the previous 48 hours, but there are still controversies about the appropriate time to perform these procedures in the current context. Moreover, the recommendation is to avoid elective treatments since speech therapists are at high risk of contamination during aerosol-generating procedures⁸.

Biosafety modifications have been needed for speech therapy in the hospital setting. At present, particular attention has been paid to personal protective equipment (PPE), including the use of face masks and face shields, N95 respirators, eye protection, gloves, goggles, and disposable aprons⁹. Current evidence indicates that N95 respirators provide better protection than surgical masks in the laboratory environment and while aerosol-generating procedures, including speech therapy, coughing, aspiration of saliva or food, and management of tracheostomy. During the management of patients with COVID-19, speech therapists must also follow guidelines on social distancing and frequent handwashing to minimize the risk of infection.

An alternative for speech therapists is monitoring patients via a call center. However, there are still controversies in the literature about the effectiveness of this approach. A systematic review did not demonstrate the effectiveness of telerehabilitation in dysphagic patients compared to face-to-face therapy¹⁰. Other studies have found benefits in the

call center approach, suggesting that it promotes increased access to clinical rehabilitation and guarantees adequate services for patients with swallowing disorders, requiring periods of intensive treatment followed by long-term management¹¹⁻¹³. In the current scenario, call centers can be an alternative means of providing services, in a complementary way or replacing face-to-face treatments. The focus of speech therapists' work at this time should be to guide the implementation of a new flow of care, both for those hospitalized for other diseases, as well as for suspected cases of COVID-19, in addition to organizing the priority demand for cases of severe bronchoaspiration in dysphagic patients. One of the greatest challenges in the current and post-pandemic speech therapy practice is the difficulty in communicating with patients through expressions and gestures to demonstrate movements, which is impaired due to the use of PPE. Communication favors the professional-patient bond and is important for adherence to the treatment. However, for speech therapists who work in the hospital setting, reducing the risk of contamination and spreading the virus must be a team effort. Speech therapy in a hospital setting faced with this new respiratory virus should be based on rigorous biosafety measures and effective collaboration of professionals in the treatment of COVID-19 patients. Studies on the functional consequences of the disease are needed to understand possible sequelae and specific needs for speech therapists.

Conflict of interest

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All authors were involved in the drafting of the article or revised it critically for important intellectual content. All authors approved the final version to be submitted for publication as stated by the International Committee of Medical Journal Editors (ICMJE): Ms. Brenda Araújo had full access to all the data and the accuracy of the data analysis. ARAÚJO participated in the concept of the study, data collection, analysis and interpretation, and writing; LIMA, GOIS-SANTOS participated in data collection; SANTOS, SIMÕES AND MARTINS-FILHO participated in guiding, the concept of the study, analysis, interpretation of data, and writing

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