SASLHA
South African Speech-Language-Hearing Association

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SASLHA's position: Dysphagia Guidelines during COVID-19

This document was compiled by Prof. Mershen Pillay (UKZN) and Dr Jaishika Seedat (WITS) in consultation with the SA SLT population regarding their needs.

It is widely recognised that hospitalised patients who are positive for COVID-19, experience difficulties with both communication and eating/drinking (swallowing); both areas are firmly within the scope of Speech-Language Therapists' (SLTs) practice in South Africa. This guideline speaks specifically to the role of the SLT in terms of dysphagia (and not aspects of speaking or communication). It is from this perspective that we believe that our profession should play an integral role in the management of the COVID-19 patient. This role, we believe, is not limited to a post-recovery phase but rather begins from patient admission into hospital and carries over to their post-recovery, as part of rehabilitation where ongoing respiratory and/or swallowing problems may persist.

This guideline document is a working document. It is intended to provide a set of guiding principles for dysphagia intervention in different contexts i.e. from the intensive care and critical care unit until the provision of tele-health services. It is important to note that this document will be regularly revised depending on the level of lockdown that the country is in at that time. This document will also direct you to currently available resources from societies and associations globally, as well as some articles that have been published. As we develop more knowledge and expertise in the field, especially from our South African cohort of practitioners; we hope to add to this set of guidelines.

All areas covered within this guideline must be considered together with policies and procedures outlined by; your facility, the Health Professions Council of South Africa (HPCSA) and the South African Speech-Language and Hearing Association (SASLHA). Thus one needs to remain cognizant of the general policies and procedures that are being operationalised at the time of use of the guideline and align these with your clinical reasoning and judgement when it comes to patient interventions in dysphagia.

Background

The provision of dysphagia services is necessary and must be considered an essential one at every level of service delivery. The similarities between signs of aspiration and the symptomatology of COVID-19, highlights the need for dysphagia service provision from admission until discharge and thereafter (rehabilitation). Care has to be taken to prevent late referral and/or identification of the need for either COVID-19 testing or dysphagia assessment because of an assumption of the presence of only one or the other.

This guideline recognises that any work related to **dysphagia** and **swallowing** management that includes oral care, cough reflex testing, implementation of videofluroscopic swallow studies (VFSS) or flexible endoscopic evaluation of swallowing (FEES), intervention with tracheostomy and ventilator dependency and laryngectomy, are considered risk procedures and potential aerosol generating procedures (AGPs). The risk for each is described below under the specific headings.

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You are also referred to: https://www.rcslt.org/-/media/RCSLT-Dysphagia-and-AGP220420FINAL-1-(1).PDF?la=en&hash=2E918D05AD4E63B0AFAE99F0DEA9ECBCFA64C9D3
It is recognised that every facility may differ in terms of Personal Protective Equipment (PPE) use both with regard to specifications as well as need for use, depending on patient presentation. Ultimately dysphagia intervention must be recognised as one that may pose a risk to both the SLT, the patient, those around the patient and the environment. Hence clinical judgement is necessary in all patient interactions and use of PPE should abide by facility guidelines, as well as guidelines provided by the HPCSA. Again, one is alerted to the need to follow accepted procedures and practice at the time of use of these guidelines. You are also referred to: https://speechtherapy.org.nz/info-for-slts/information-regarding-covid-19/

Within the different contexts that patients with or suspected of presenting with dysphagia are seen, as the SLT you are still required to where possible, prioritise the need to intervene with them. There are two aspects that are worthwhile noting:

1. Risk identification, both in terms of COVID-19 as well as risk for aspiration
2. Triage i.e. the urgency and priority for dysphagia intervention.

The above will be guided by; the reason for referral based on presenting signs and symptomatology as well as concerns for aspiration, nutrition and hydration. You are referred to **page 6** of the following guideline that provides a flowchart that will guide your triage of the patient: https://www.speechpathologyaustralia.org.au/SPAweb/About_us/COVID-19_News_and_Information/COVID-19_-_Guidance_for_Service_Delivery/SPAweb/About_Us/COVID-19/Guidance_for_Service_Delivery.aspx?hkey=fc19a880-e7a8-4246-8631-a474fc43d4ae

SASLHA Recommended Guidelines

Table 1 provides links to guidelines provided by societies and associations from other countries.

Table 1: Links to guidelines from other countries

Parameter/Guideline	Relevant sources and links
1. Clinical Swallow Evaluation	https://speechtherapy.org.nz/wp-content/uploads/2020/05/ClinicalSwallowingEvaluationwithoutCRTandFEES-1.pdf https://www.speechpathologyaustralia.org.au/SPAweb/About_us/COVID-19_News_and_Information/COVID-19_-_Guidance_for_Service_Delivery/SPAweb/About_Us/COVID-19/Guidance_for_Service_Delivery.aspx?hkey=fc19a880-e7a8-4246-8631-a474fc43d4ae

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	https://www.rcslt.org/-/media/docs/Covid/RCSLT-Dysphagia-and-AGP220420FINAL-1-(1).PDF?la=en&hash=816B77BE5A88976CD97F32B84754F223FA761C54 https://www.iaslt.ie/documents/public-information/COVID%2019%20IASLT%20Guidelines/IASLT%20COVID-19%20Guidance%20March2020.pdf
2. Instrumental Evaluation 2.1 VFSS 2.2 FEES	https://www.speechpathologyaustralia.org.au/SPAweb/About_us/COVID-19_News_and_Information/COVID-19_-_Guidance_for_Service_Delivery/SPAweb/About_Us/COVID-19/Guidance_for_Service_Delivery.aspx?hkey=fc19a880-e7a8-4246-8631-a474fc43d4ae https://www.rcslt.org/-/media/docs/Covid/RCSLT-COVID-19-SLT-led-endoscopic-procedure-guidance_FINAL-(2).PDF?la=en&hash=8101575091FE8F1ABA41B4B472387DAFB023A39D
3. Patient populations 3.1 Post-surgical 3.1.1 Tracheostomy and ventilator dependent 3.1.2 Laryngectomy 3.2 General medical	https://www.speechpathologyaustralia.org.au/SPAweb/About_us/COVID-19_News_and_Information/COVID-19_-_Guidance_for_Service_Delivery/SPAweb/About_Us/COVID-19/Guidance_for_Service_Delivery.aspx?hkey=fc19a880-e7a8-4246-8631-a474fc43d4ae
4. Contexts (Tele-health)	https://www.iaslt.ie/documents/public-information/COVID%2019%20IASLT%20Guidelines/IASLT%20COVID-19%20Guidance%20March2020.pdf
5. Tele-Practice	https://www.speechpathologyaustralia.org.au/SPAweb/Resources_for_Speech_Pathologists/Professional_Resources/HTML/Telepractice_Resources.aspx?hkey=311bddee-3dd1-43a2-8a88-6b0189f71d12

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1. Clinical Swallow Evaluation (CSE)

While the CSE may be a low AGP, there may be aspects such as cough reflex testing and oral care that need specific consideration. The CSE should be postponed if:

- the patient is not alert and fully conscious
- the patient is COVID positive, ensure correct PPE and follow recommendations below. Postpone if not urgent.
- Patient is on alternate feeds and is receiving some form of nutrition.

1.1 Recommended protocol

Prior to entering the ward ensure that you have the correct PPE. Work efficiently to maximize time you have. Work towards having minimal contact time with the patient, hence prioritise depending on reason for referral and presenting signs. Always ensure that you are wearing regulated PPE and treat each patient as though they may be COVID+. Research has shown that patients may test positive after a period of time, hence you do not want to risk your exposure to the virus. Position yourself to the side of the patient (in the event of coughing or choking). Stand a minimum of 1.5m away from the patient. You may want to source information from the nurse and other health and medical personnel pertaining to oral hygiene, saliva control and secretion management, spontaneous coughing, etc. so as to avoid direct manipulation of the oral cavity and structures. Refine your typical protocol i.e. food and liquid trials to minimize the number of trials and the amounts of bolus being trialed. Consider with procedures such as the modified Evans' blue dye test, the use of good infection protocols for the container/bottle in which the dye is contained, the dropper and/or utensil used to deliver the dye orally and the risk of cross-infection between patients when the same dye and storage equipment is used.

Due to the unpredictable nature of the cough, it is difficult to recommend any specific consistency to start with for the CSE. Whilst water (thin) would be optimal to prevent aspiration pneumonia, it may result in coughing. While a thicker consistency is less likely to induce a cough, it may be contraindicated for aspiration (pneumonia). At every step, it is therefore necessary for you to use clinical reasoning and judgement. Thus the protocol will be patient dependent. Monitor respiratory status and breathing throughout assessment, and where possible the use of pulse oximetry is advocated. Cervical auscultation is not recommended. As a screening measure, the use of the South African Dysphagia Screening tool is recommended to guide the need for further diagnostic intervention.

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1.2 Management

Prior to any intervention, ensure that you have the correct PPE and follow the infection and sanitization protocols of your facility. Determine the priority and urgency for management. Where possible, avoid or postpone direct management i.e. direct manipulation of oral cavity, thermal tactile stimulation, etc. Behavioural management and use of modification techniques is advocated. You want to check the ability of the patient to implement the management techniques independently prior to formal recommendations.

As above, clinical reasoning and judgment is required in terms of need for direct management versus patient-led management. Always ensure adherence to PPE and infection and sanitization protocols. For example, if management procedures involve the use of equipment that increases or involves closer contact with the patient (including skin/surface contact) then this needs to be provided against risk-benefit evaluation. Over and above the need to protect yourself from infection, as the SLT you also need to prevent transfer of pathogens via use of equipment/etc. from one patient to the next, hence disinfection and sanitization protocols of equipment from one patient to the next is a priority.

For COVID-19 patients who are referred to the SLT to determine readiness to move on to oral feeds, these assessments should be delayed under certain circumstances. The patient needs to be receiving nutrition and hydration via an alternate (enteral) route, and only then should your assessment to move on to oral feeds be delayed until a negative viral result for the patient. Use of a nasogastric tube does not pose significant risk for aerosol generation.

2. Instrumental Evaluation

These procedures should only be conducted if urgent and essential to the patient's survival. Please ensure consultation and agreement from the multidisciplinary team prior to any of the procedures below. Where necessary, as the SLT you will need to advocate for your role and the procedure ensuring that you have sufficient 'evidence' in the form of dysphagia and aspiration signs that speak to the need for **the** procedure specifically. In considering presenting signs, evaluate and be critical about the specific added information that you may gain from the procedure that cannot be gained in any other way. Consider your safety, individuals around you and the patient, the patient and the environment around you. Should any procedure be urgent, ensure adherence with PPE protocols. The VFSS and FEES are both considered AGPs, although VFSS may be low risk and FEES a high risk AGP.

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2.1 Videofluroscopic Swallow Study

This should only be performed if essential. The need for clinical reasoning is essential. Only if urgent and there is anticipated compromise to pulmonary safety with severe risk for malnutrition, should the procedure be performed but in consultation with the team. Ensure appropriate PPE. An absolute priority for VFSS is a thorough disinfection and sanitization protocol before and after the procedure. All equipment, surfaces and utensils must be wiped down and disinfected after use. Also consider the protocol to move the patient from the ward to the radiology department. If challenges and difficulty complying with infection and sanitization procedures cannot be resolved, then the VFSS should not proceed. In addition to optimising your safety risk as the SLT, this needs to be considered for other patients and professionals as well.

2.2 Flexible Endoscopic Evaluation of Swallowing

Note that this is a high AGP, should be avoided and only be conducted if deemed essential for the patient's survival. These conditions may include no alternate feeding option, or concerns pertaining to airway compromise. As with VFSS, there must be consultation and agreement of need from the MDT. Ensure adherence with appropriate PPE guidelines and conduct strict disinfection and sanitization procedures for all surfaces, equipment and consumables used. Wiping down of all contact surfaces and equipment after completion of the procedure is not negotiable to prevent patient-to-patient transfer of infection.

3. Patient populations

It is necessary that each patient is viewed independently and a risk assessment is conducted prior to any intervention. Wherever possible, intervention should be postponed until the patient has a negative viral status. The safety of both the SLT and the patient must remain a priority. Given that COVID-19 and aspiration pneumonia (due to dysphagia) both have the lungs as the site of compromise, patient susceptibility for medical compromise is increased. Thus the need for dysphagia intervention for any patient presenting with signs of dysphagia or any patient at risk for dysphagia (e.g. ventilator dependent, extubated, tracheostomised patients or those being weaned off ventilation), is vital. The provision of dysphagia services by the SLT is thus considered an essential service at all levels, dependent on patient risk and presentation.

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For each of the categories listed below, you are encouraged to use clinical reasoning and ascertain the need for intervention at the current time. Where possible, intervention may be postponed but without compromise to swallow safety, aspiration risk or malnutrition. Frequent monitoring of patients' aspiration risk in such cases is necessary and re-assessment of risk rating must be done and decisions documented to safeguard the SLT. Adherence to PPE protocols is advocated. SLT positioning in relation to patient should be considered (on the side as opposed to in front of), distance of SLT to patient should be maintained (no less than 1.5m) and where possible information secondary to direct dysphagia assessment and/or management should be obtained before-hand from other professionals consulting with the patient.

3.1 Post-surgical

Patients with surgically modified airways such as patients with tracheostomy and patients with laryngectomy, are important populations for the SLT to monitor and manage from a swallowing perspective. Please note that this guideline pertains only to dysphagia and swallowing under COVID-19 (given that the upper aero-digestive tract has a high viral load), and not to aspects pertaining to speech and communication, especially for the given populations i.e. tracheostomy and laryngectomy.

3.1.1 Tracheostomy and Ventilator dependent patients

SLT intervention with tracheostomy and ventilator dependent patients should commence as early as possible. These patients need careful monitoring due to their risk for aspiration. Management and monitoring of secretions also requires careful monitoring and documentation. Should the SLT not be able to intervene directly with these patients initially, a channel of communication between the nurse and/or other professionals must be established to enable feedback on signs of possible aspiration as well as how the patient is coping with their secretions.

It is important to remain cognizant that these populations represent a potential risk for transmission of the virus to the SLT. Hence adherence to appropriate PPE, SLT positioning in relation to patient, and distance of SLT from patient, must be maintained. As part of recovery from COVID-19, facilities may find that they have a higher than normal number of individuals on ventilation and who require tracheostomy. The role of the SLT with a patient with a tracheostomy as part of the COVID-19 context extends to: cuff manipulation, swallowing assessments, and decannulation. Cuff manipulation and decannulation should be postponed until negative viral load testing. It is recommended that the patient receive non-oral feeds with cuff inflated until safe to intervene. Consider the effects of prolonged cuff inflation. There may be a need to conduct a

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modified Evans blue dye test as part of an assessment to determine aspiration prior to oral feeds. Always ensure that all equipment and materials used during the modified Evans test are rigorously disinfected and sanitized. Generally, wherever possible, obtain information from other members of the team to aid in your decision making. Integrate this with signs you observe to inform your clinical decisions and when determining your intervention strategy. You are referred to:

- Takhar A, Walker A, Tricklebank S, et al. Recommendation of a practical guideline for safe tracheostomy during the COVID-19 pandemic. *Eur Arch Otorhinolaryngol*. 2020;21:1–12.

- David A, Russell M, El-Sayed I, Russell M. Tracheostomy guidelines developed at a large academic medical center during the COVID-19 pandemic. *Head & Neck*. 2020. https://doi.org/10.1002/hed.26191

- Botti C, Lusetti F, Castellucci A, Costantini M, Ghidini A. Safe tracheotomy for patients with COVID-19. *Am J Otolaryngol*. 2020;7:10253

- Piccin O, Albertini R, Caliceti U, et al. Early experience in tracheostomy and tracheostomy tube management in Covid-19 patients. *Am J Otolaryngol*. 2020;7:102535.

3.1.2 Laryngectomy

Patients' post-laryngectomy pose a potential risk for transmission of infection to the SLP. Thus speaking valve assessment should be delayed as far as possible to when the patient's viral load is negative. Specifically pertaining to swallowing, it is recommended that the patient wear protection e.g. a stoma mask/bib over the stoma to prevent spread of pathogens. If the patient has a tracheoesophageal prosthesis, enquire about swallowing from the team. If there are reports of leakage with food and liquid, consider modification of textures. Consider access to food thickeners. The use of compensatory swallowing techniques is also advocated for this population.

3.2 General Medical

As the SLT you need to ensure that you have a presence in the ward if even telephonic. There needs to be a shared understanding by all health and medical staff of the importance of early dysphagia intervention to prevent avoidable adverse consequences and ensure that aspiration pneumonia does not unnecessarily delay discharge and increase hospitalisation costs for the patient. Prior to intervention, and as part of your triage protocol, one should have a clear indication of the patient's result prior to contact. If intervention is required before results are obtained, intervention and contact should proceed as though the patient is positive for COVID-19 to safe-guard the wellbeing of the SLT. Use PPE in interactions, and

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ensure distance (min of 1.5m) and positioning (to the patient's side). Work to get information efficiently and effectively but within a short space of time. If necessary, modify your typical CSE by reducing the different consistencies that need to be trialed and consider amounts being trialed. Consider specific AGPs e.g. cough reflex testing and oral hygiene.

4. Context

As a working document, an extension to this guideline is to follow on dysphagia management in different contexts. This will align with the levels of lockdown that are present. Generally, it is advised that community and/or home care patients are not prioritised if they are medically stable and have low/no aspiration risk. This is necessary to reduce the transmission of COVID-19. For service provision using tele-health platforms, one is referred to the HPCSA and SASLHA COVID-19 guidelines. You are referred to: https://www.hpcsa-blogs.co.za/hpcsa-covid-19-guidelines and SASLHA COVID-19 STATEMENT

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