Speech and language therapist-led endoscopic procedures in the COVID-19 pandemic
Acknowledgements

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1. INTRODUCTION

At the start of the COVID-19 pandemic, consensus was reached in partnership with ENT colleagues that all SLT-led endoscopy procedures should temporarily cease due to concerns about higher risk of viral transmission during nasendoscopy (BLA, 2020; ENT UK, 2020a). As we continue with the restoration of services and in response to feedback from RCSLT members, this SLT-led endoscopy guidance has again been revised further (following the previous June 2020 update). During the pandemic, there remains a need to be vigilant in our approach to performing SLT-led endoscopy procedures. We also recommend that, along with this guidance, members refer to the updated RCSLT guidance on the risk of transmission and personal protective equipment.

This is a working document that will be reviewed and revised in response to any significant new evidence, member queries and feedback.

2. KEY RECOMMENDATIONS

This document provides revised guidance to support the delivery of SLT-led endoscopy during the COVID-19 pandemic and is relevant to a wider range of clinical conditions than previously. The expert group have considered the feedback from RCSLT members and made the following key recommendations:

1. This paper clarifies that the guidance applies to all patients regardless of their COVID-19 status and care settings
2. PPE requirements are in line with the high, medium, and low risk patient pathways as defined by PHE (see section 5.2)
3. FEES or SLT led endoscopy can be performed by either level 2 or 3 SLT endoscopists.
4. Trainee (level 1) SLTs can be involved in supporting FEES or SLT led endoscopy assessment procedures. The standard protocols for all SLT-led endoscopy procedures should be followed as set out in the relevant RCSLT position papers (FEES, EEL, Adult Respiratory Care).
5. SLT-led endoscopy may be used for the purposes of clinical assessment, research, audit, and service evaluation where relevant approvals have been obtained.
3. CONTEXT

The RCSLT considers that SLT-led endoscopy for the purposes of upper airway functional assessment is an aerosol generating procedure (AGP) (Bolton et al, 2020).

Endoscopy remains a higher risk procedure for the potential transmission of COVID-19 (Ku et al, 2020) for healthcare workers as the nose and nasopharynx are known to be reservoirs for high concentrations of the virus (Zou et al, 2020). The upper airway endoscopy has the potential to generate aerosols through sneezing, coughing, and gagging (Lui et al, 2019; Rameau et al 2020; Workman et al, 2020). The highest risk of transmission of viruses is during AGPs of the respiratory tract, which requires the use of enhanced respiratory protective equipment for healthcare workers performing or assisting in such procedures (PHE, 2020a).

4. CLINICAL DECISION-MAKING

It is essential that prior to undertaking any SLT-led endoscopy procedures, members refer to the updated RCSLT guidance on reducing risk of transmission, use of personal protective equipment (PPE) in the context of COVID-19 which includes a risk framework to support clinical decision making and full consideration of alternative options.

The decision to perform SLT-led endoscopy should continue to be a multidisciplinary one. Discussion and planning with the patient’s clinical team in advance of the procedure will ensure that the risk-benefits are clearly identified, understood, and mitigated to inform the appropriateness of the procedure as part of routine FEES protocol.

**It is important that steps are taken to establish the patient’s current COVID-19 status and level of risk as per government and local guidance prior to undertaking any SLT-led endoscopy procedure.**

It is the responsibility of the MDT to weigh up the risks and benefits for potentially delaying the procedure in suspected or confirmed COVID-19 patients until the exposure risk is lower where this does not adversely compromise patient care. We suggest using the PHE guidance relating to COVID-19 risk pathway for reference (PHE, 2020b).

In addition, for patients with COVID-19 in acute and critical care settings, the following risk factors should be considered as part of the ‘new normal’ practice with modifications:

- Delirium
- Desaturation on suctioning or other procedures, including repositioning
• Coagulopathy issues and need for anticoagulants (due to bleeding risks on nasendoscope insertion)
• Rapid fatigue
• Cardiac instability

5. INFECTION PREVENTION AND CONTROL

5.1. Areas where SLT-led endoscopy is performed

National and local infection prevention control guidance should be followed (PHE 2020a) regarding recommended clinical areas where endoscopy can be performed (e.g. designated rooms, endoscopy units, ICU). Procedures to be followed include ensuring sufficient ventilation and room air changes to facilitate clearance of any potentially infectious particles. The endoscopy procedure end time should be clearly communicated to appropriate team members.

5.2. PPE

In line with PHE guidance ‘COVID-19 Guidance for the Remobilisation of services within health and care setting: infection prevention and control (IPC) recommendations’ (Version 1: 20 August 2020), SLTs need to designate patients to the appropriate patient pathway group as defined by PHE (see below) and following assessment using the RCSLT risk assessment framework in Annex 1 of the RCSLT guidance on reducing the risk of transmission and use of personal protective equipment (PPE) in the context of COVID-19.

According to PHE guidance patient treatment, care and support should be managed in three COVID-19 pathways:

<table>
<thead>
<tr>
<th>High Risk Pathway</th>
<th>Medium Risk Pathway</th>
<th>Low Risk Pathway</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patients who have, or are likely to have, COVID-19</td>
<td>Patients who have no symptoms of COVID-19 but do not have a COVID-19 SARS-CoV-2 PCR test result</td>
<td>Patients with no symptoms and a negative COVID-19 SARS-CoV-2 PCR test who have self-isolated prior to hospital admission</td>
</tr>
</tbody>
</table>
The PPE requirements for AGPs for low, medium, and high-risk groups are outlined below.

(Please note: these are PPE recommendations for SLT led endoscopy/FEES which are based on PHE risk pathways).

<table>
<thead>
<tr>
<th>PPE AGP High Risk Pathway</th>
<th>PPE AGP Medium Risk Pathway</th>
<th>PPE AGP Low Risk Pathway</th>
</tr>
</thead>
<tbody>
<tr>
<td>FFP3 mask or hood</td>
<td>FFP3 mask or hood</td>
<td>FRSM mask</td>
</tr>
<tr>
<td>Disposable gloves (single use)</td>
<td>Disposable gloves (single use)</td>
<td>(Surgical mask Type II for extended use* FRSM Type IIR for direct patient care*)</td>
</tr>
<tr>
<td>Disposable apron/gown (single use gown)</td>
<td>Disposable apron/gown (single use gown)</td>
<td>(*extended use of facemasks in England/Scotland for HCW when in any healthcare facility)</td>
</tr>
<tr>
<td>Eye protection (single or re-usable)</td>
<td>Eye protection (single use or re-usable)</td>
<td>Disposable gloves (Single use)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Disposable apron/gown (Single use apron (gown if risk of spraying / splashing))</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Eye protection (Risk assess and use if required for care procedure/task where anticipated blood/body fluids spraying/splashes)</td>
</tr>
</tbody>
</table>

*Table adapted from PHE guidance.*

Recent PHE (2020b) guidance highlights that a number of UK short life working groups led by NHS Estates are undertaking further work on ventilation requirements and fallow periods following AGPs in various environments. This work will be disseminated in due course and will provide ongoing guidance regarding ventilation requirements.

Negative ventilation is preferable, but not mandatory. It is possible for extractor fan units to be utilised to create negative pressure air exchange. Advice on the designated room and the time required for a ‘rest period’ should be determined by microbiological advice according to the room ventilation characteristics should be sought from the local
infection prevention and control team.

For low risk patients there is no additional requirement for ventilation or downtime in this pathway, providing safe systems of work, including engineering controls are in place (PHE, 2020b).

For AGPs performed as a single procedure, PPE is subject to single use with immediate disposal following completion of the procedure. Strict adherence to PPE donning and doffing procedures according to national guidance is required (PHE, 2020b).

Consideration should also be made regarding the use of face masks by the patient (PHE, 2020b) to reduce risk of transmission, where this can be tolerated and where the mask does not interfere with aspects of their care (e.g. oxygen delivery). Patients may be able to wear a simple or modified surgical mask or other suitable face covering during SLT-led endoscopy procedures which do not involve eating and drinking. Several devices have been proposed and developed. These must receive relevant national and local approval before being used on patients.

5.3. Equipment and decontamination

It is essential to ensure that local infection prevention and control (IPC) approval and equipment manufacturer guidance on decontamination has been sought as part of the risk assessment. When appropriate, disposable patient equipment should be considered (PHE, 2020a) informed by the outcomes of a risk assessment and in discussion with local IPC teams. IPC guidance on endoscopy decontamination and disposal of equipment and consumables should be followed immediately after the procedure to avoid virus transmission and cross-contamination.
6. CONSIDERATIONS FOR THE PROCEDURE

FEES or SLT led endoscopy can be performed by either level 2 or 3 SLT endoscopists. Trainee (level 1) SLTs can be involved in supporting FEES or SLT led endoscopy assessment procedures.

We recommend that endoscopy is always performed with visualisation on a monitor.

For FEES, an abbreviated procedure is no longer indicated, and it is recommended that SLTs utilise the standard protocol as set out in the RCSLT FEES position paper. Careful assessment of the structures of the larynx and upper airway is required due to the known laryngeal complications associated with COVID-19 disease and intubation trauma, (McGrath et al, 2020). For voice and upper airway disorders, follow existing protocols and RCSLT guidance.

To maximise the diagnostic yield and value of the images for the wider MDT, the evaluation should be recorded. This may avoid unnecessary repetition of endoscopic procedures.

7. TRAINING

Given the current challenges, as a result of the pandemic, in providing support and supervision for competency acquisition, we would suggest that SLTs seek innovative approaches to resolving these. For example:

- Risk assessment for observation and shadowing in clinics outside your organisation
- Virtual platforms to support:
  - Remote mentoring, peer support and interpretation
  - Setting up simulation as a blended approach to education and training
  - Live demonstrations

Due to the temporary suspension of FEES in Spring 2020 and the challenges some services have experienced in restoring services, it is acknowledged that not all clinicians will attain the standard minimum practice of 12 FEES this year.

The RCSLT recommends that members should reflect on their performance with a peer or supervisor after they resume practice to provide an opportunity for additional support if needed.
8. OUTCOME MEASURES AND AUDITS

In addition, the RCSLT recommends that members continue to collect and submit clinical outcome data using the COVID-19 speech and language therapy data collection tools for confirmed COVID-19 patients.

In line with best practice, service evaluations, research and audits for SLT-led endoscopy are encouraged.
9. REFERENCES


