

Welcome to the webinar:

The COVID-19 patient pathway for SLTs

COVID-19: Critical Care for SLTs

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13:00



Welcome



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Presenters



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Housekeeping



- Send in chat messages at any time by using the Chat button
- Send in questions by using the Q&A button
- This event is being recorded. See here for recordings:
<https://www.rcslt.org/webinars>
- Please do fill in the survey that we'll share after the event
- Rebecca Corderoy is on hand to help!

Aims and objectives



By attending this webinar, you will gain an understanding of:

- What is the disease? What do we know? Typical presentations of a patient in the COVID-19 critical care pathway
- How the COVID-19 ICU experience differs from the normal scope of practice
- Intubation, post extubation issues
- Tracheostomy management and weaning



Does our input support best SLT practice or is it going to actually change the medical status/outcome for the patient?

This question needs to also weigh up and consider the risks to staff/patient vs benefits

What is the disease?

What do we know?



- New cohort with myriad of symptoms
- Categorised into 2 main phenotypes
 - Phenotype ‘L’ COVID pneumonitis
 - Phenotype ‘H’ ‘ARDS-like’
- Hypoxaemia main issue → respiratory failure but some will have hyper-inflammatory response → multi organ failure
- https://esicm-tv.org/webinar1_live_20-how-to-ventilate-in-covid-19.html

What is the disease?

What do we know?



- Some may require ECMO + higher rehab needs
- Longer duration of disease, not easily reversible
- Laryngeal oedema (COVID related) in addition to what we would expect from intubation

McGrath BA, Wallace S, Goswamy J Anaesthesia 2020
<https://doi.org/10.1111/anae.15092>
- High incidence of Acute Kidney Injury (AKI) and the need for renal replacement therapy (RRT)



What is the disease?

What do we know?



- Neurotropic component (virus has a preference to affect nervous system/centres)
 - Cardiorespiratory centres (midbrain)
 - Delirium
 - Cognition
 - +/- isolated CN impairments (Trigeminal neuralgia ? Hypoglossal)
 - Don't underestimate the value of cranial nerve ax



Complex critically ill patients = complex rehabilitation needs!

ICU pathway

Intubation & Ventilation, sedated in A&E with Endotracheal Tube
ETT (+/- hypoxia)

OR

CPAP, may deteriorate leading to I & V with ETT



Proning (if needed) within first 48hrs, sedation ++



Ventilator wean – reduce pressures and PEEP, spontaneous
breathing trial using T-piece or CPAP trial via ETT

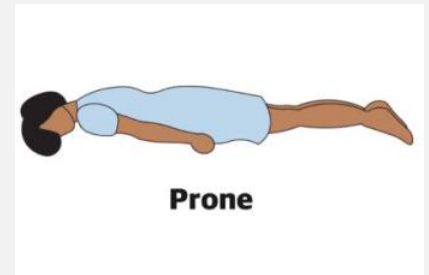
May fail extubation, need re-intubation



Extubate to HFNC, or CPAP (face mask /hood), normal nasal specs

OR

Trache +/- ventilator wean, decannulate

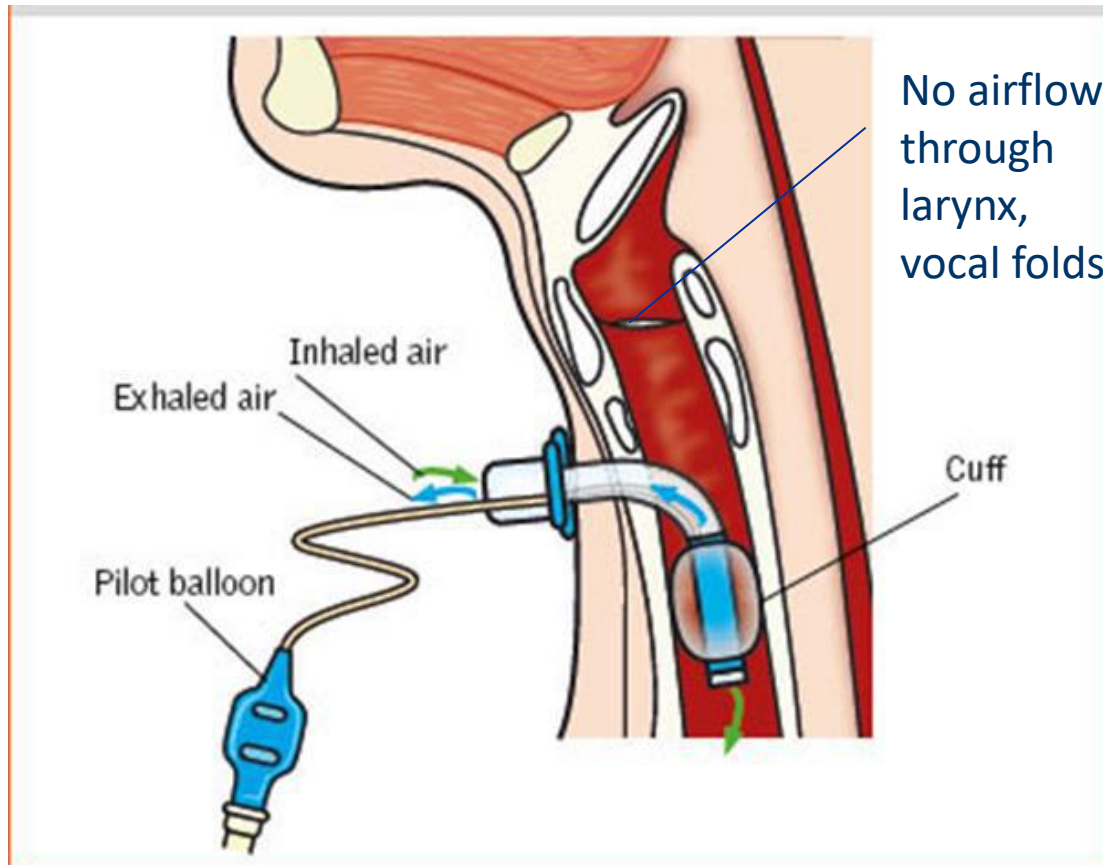


Post extubation assessment



- RCSLT website, Brodsky et al 2020 *American Journal of Physical Medicine & Rehabilitation* Articles Ahead of Print DOI: 10.1097/PHM.0000000000001440
- Prolonged intubation – high propensity (62%) for developing dysphagia and dysphonia (lasting up to 2 weeks), under-identified
- Strong association between dysphagia frequency and severity with increased duration of intubation, refer all vs screening
 - NM blocking agents, ICU-acquired weakness with inherent swallowing muscle atrophy, pharyngeal sensory loss, laryngeal trauma -vocal fold palsy, oedema, stenosis, dys-synchrony of swallowing and respiration, silent aspiration
- Laryngeal injury is a concern
- High mouth care needs
- Think of “routine” SLT swallow advice (pacing, bolus size/texture)
- Post extubation aphonia / dysphonia common

Trache vent airflow



Trache - ventilated patients



- Not advocating routine SLT practices of early cuff deflation, one-way valve or Above Cuff Vocalisation (ACV) on ventilator – AGPs
 - ACV risks - secretion expulsion, oedema, SC emphysema
 - *Still needs careful consideration with your MDT – AGP vs practicality ?patent airway. e.g. palliative care pts*
- SLTs may get involved later once off ventilator
- Focus on communication/AAC support early on - batch of resources with visual aids
- Dysphagia therapy (cuff up) *if indicated*

Trache patients (spont vent)



- There is a lot of fear with first cuff deflation
- All trache patients are treated as “COVID-positive” with risk of AGPs in any cuff deflation (full PPE)
- A cuff deflated with one way valve in a self ventilating patient is no different to conversing with a COVID positive non trache patient
 - PPE implications - pt wears mask on trache and mouth, closed circuit suctioning is advocated by GTC, NTSP
- Remember the evidence that trache tubes per se do *not* cause dysphagia, consider deconditioning

Trache layout with closed circuit suction



Trache weaning pathways



- Remember the evidence- that trache weaning is best done as an MDT, so try to keep having a strong presence in this
- Question – do you need to do anything differently within sensible risk discussions?
- Is there a need to limit tube changes?
- Putting in large trache tubes: may need downsizing

Trache weaning pathways



- Consider timing of initial cuff deflation with MDT
 - Case by case discussion
 - Aim would always be to balance the following (!)
 - risk of generating AGPs
- vs**
 - early identification and treatment of airway/laryngeal issues
- vs**
 - ensuring safe decisions can be made re: airway patency and bulbar function
- vs**
 - rehab readiness, pt needs (incl communication) and goals

Trache weaning pathways



- Consider trache weaning as per your usual cuff deflation/weaning pathways with a focus on the following:
 - Cohort pts together
 - Tolerance of cuff deflation for agreed time
 - Maintenance of O₂ sats with cuff down (+/- OWV)
 - Chest status – secretion load, signs of chest infection, RR, SOB
 - Secretion management – cough strength, expectoration ability, reliance on tracheal suctioning
 - Voice and airway patency – with gloved finger/valve
 - Swallow of own secretions

Trache weaning cohorts



1. Respiratory failure pts +/- laryngeal patency issues.
‘Standard’ wean, some ICU acquired weakness
 - May decannulate on ICU before step down

Trache weaning cohorts



2. Hyperinflammatory /Multi-organ failure complex & potentially prolonged weaning group
 - Expect hybrid of respiratory, airway patency/laryngeal injury, neuromuscular/ ICU weakness/renal/cardiac presentation
 - Will need collaboration of respiratory/ ENT/ neurorehab teams + therapy
 - Step down?

Considerations for COVID survivors



- Breathlessness- impact on swallow
- Ongoing respiratory issues/lung function
- Post Intensive Care Syndrome (PICS)
- Post traumatic stress disorder
- Dysphonia management
- Chronic airway issues e.g stenosis

Additional points



- In the absence of FEES for now consider:
 - Any failure of supraglottic airflow, discuss with ENT
 - Use of dexamethasone, PPIs - case by case
 - VFS if COVID -ve, Laryngeal US in development
 - Cognitive Communication Disorders follow-up
- Be proactive, seek out referrals, many new MDT members on ICU may not be familiar with our role
- Collect data - RCSLT project

Psychological burden – what about us?



- PPE is hot & hard work so physically slower
- Working with higher volumes of sick patients
- Patients are very scared and no family support
- Lower our expectations of what we can deliver in a day (may see less patients than normal)
- Important to talk with others/share how you are feeling

Any Questions?



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