Welcome to the webinar:
The COVID-19 patient pathway for SLTs

COVID-19: Critical Care for SLTs

FRIDAY 24 APRIL 2020
13:00
Welcome

Kamini Gadhok, MBE
CEO, RCSLT
Presenters

Sarah Wallace
Consultant SLT
Manchester University NHS Foundation Trust

Sue McGowan
Clinical Specialist SLT
National Hospital for Neurology and Neurosurgery

Christina Iezzi
Clinical Lead SLT
Guys and St Thomas’ NHS Foundation Trust
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
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

No airflow through larynx, vocal folds
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 $O_2$ 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?
Join us for the next webinar

COVID-19: Rehabilitation

www.rcslt.org/webinars