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PHYSIOTHERAPY RESPONSE TO MANAGING HOSPITALIZED PATIENTS WITH COVID-19

Webinar recording: **April 15, 2020**
URL: https://ubccpd.ca/physiotherapy-response-managing-hospitalized-patients-covid-19

Disclaimer: Information on COVID-19 is changing rapidly and much of the research is preliminary. The protocols are suggestions only; they do not take the place of clinical judgement. Please check with your own health authorities and local medical health officers as direction, policies, and prevalence vary between regions.

These answers were topical and up-to-date as of the session, but recommendations are changing frequently. This summary was prepared by the speakers of the webinar.

Webinar Summary

Question & Answers

Q: Are hospitals in BC using proning with their ventilated patients? We are doing this in Ontario to great results. 16 hours prone, 8 hours supine is the protocol.
A: Yes, we are proning some of our ventilated patients on a similar protocol. [Amy Ellis]
A: Yes. [Jill Longhurst]

Q: Is early mobilization while COVID19 pts. are still ventilated being practiced as they seem to be at high risk of spontaneous decompensation?
A: We are initiating mobility once that patients have met the criteria that I mentioned in the talk – weaning sedation, tolerating repositioning by nursing, no paralytics, off ALI ventilation and in discussion with the medical team. We have seen a good response to this approach. It is not as early as we are usually involved with vents but it is earlier than originally anticipated. We were initially only seeing patients after extubation. We also monitor response, if a patient is showing signs of intolerance we hold off. [Amy Ellis]
A: Yes, but they are being assessed on an individual basis. [Jill Longhurst]

Q: What preparations are being made at rehab centres for a possible influx of patients affected by critical care myelopathy/polyneuropathy?

A: Right now, we are seeing patients are testing negative by the time they are rehab ready. Patients are still acutely ill while testing positive so my expectation is that we will be continuing with early rehab in the hospital setting while patients are testing positive. The other concern is that some of our rehab units are based in LTC facilities and it would not be advisable to send positive patients into that environment as we know they are very vulnerable to outbreaks. There was in interesting article that came out of Italy that noted one of their failures early on was that overflow COVID-19 patients were admitted to available beds in care facilities (https://www.cbc.ca/news/covid-19/italy-covid-19-outbreak-lessons-1.5517520). [Amy Ellis]

A: There is a multi-disciplinary working group taking a comprehensive look at "Post-Acute Recovery following COVID", including potential rehab needs. [Jill Longhurst]

Q: Is there anything those in the private sector should be doing/preparing for/brushing up on/etc. in preparation to support the public system?

A: Attending webinars like this one. There are some resources that Simone mentioned are available through CPA Cardioresp division. Reading up on pulmonary rehab principals would be good for managing patients that may need follow up in the community. More specific learning and orientation would be rolled out at each site if you were on boarded to support. [Amy Ellis]

A: Reading/education like Amy mentions and keeping an eye open for emerging rehab and COVID recovery evidence, to see where your practice could fit in. [Jill Longhurst]

Q: In your areas are there currently enough PTs to handle the patient demand? Do you anticipate the number of patients with COVID-19 will exceed staff capacity?

A: Our current PT staffing appears to be meeting needs from a SMH perspective. I am not sure about other health authorities and the more rural sites. The situation is still very dynamic and we are involved in on going pandemic planning. [Amy Ellis]

A: Staffing is currently good at VCH, with contingency plans in place. Hopefully our collective efforts prevent a large surge but we are preparing just in case! [Jill Longhurst]

Q: Have recovering patients been transitioned to rehab or other discharge destinations other than home?

A: So far our SMH patients have been rehabbed while admitted and have been able to transition home with home exercise programs and equipment. [Amy Ellis]

Q: When finally discharging patients from the hospital are you still using community physiotherapy to assist this transition?

A: Yes, community PT is still involved. They are limiting home visits and are using telerehab as an alternative where possible. They are also looking at where there are other team members going in is there an opportunity from them to assist with PT needs. [Amy Ellis]

Q: What secretion clearance techniques are you able to use with Covid-19 patients?

A: For intubated patients – Mobility, facilitation of lateral costal expansion and manual techniques (If patients have clear signs of sputum retention impacting resp status and other techniques have failed), we are looking into the use of PEP with in a vent circuit but this has not been tried with a patient yet and is based on a case series. For non-ventilated patients – ACBT (Thoracic expansion with insp holds, huffing and diaphragmatic breathing), OPEP (we use acapella) and mobility are our main techniques we are using. [Amy Ellis]

Q: Are you initiating proning prior to the patients becoming severely hypoxic, as the early literature seems to show Covid-19 patients respond well to proning.

A: We are using awake proning at SMH. There had been variable response and it dose not always result in avoiding intubation. We do this in consultation with the medical team as these patients are at high risk for deterioration. [Amy Ellis]

Q: Can you speak to the demographics you have seen in intubated pats. We've seen 25+ intubated COVID patients ages 34-66. We have not seen any dramatic CIM?

A: We have seen CIM in our longer term ventilated patients. We have patients on CRRT as well. They all have a degree of weakness post extuabtion, this is part disuse but there seems to be a CIM component as well. They have responded well to PT intervention but have very low endurance initially from both a cardio resp and muscle strength perspective. We have not have a severe case that points to CIPN at this stage. [Amy Ellis]

Q: Are you not assessing on stairs? At my hospital we are taking them on stairs with environmental services on standby to sanitize the stairs right afterwards

A: At SMH we are taking a mobile step into the room and are assessing step ups using the end of the bed as a rail. We leave the step in the room if we want the patient to continue to practice. From a risk of transmission perspective we are not taking the patients out of their room for PT interventions. Even having a clean straight after potentially exposes more people (The cleaning staff) as well use using up more PPE (PPE for PT, mask for patient and PPE for environmental services) than assessing in the room. If we need to remove the step we clean it with activated hydrogen peroxide. [Amy Ellis]

A: We're not going out into stairs, and are minimizing the equipment going in and out of the room, hence the use of squats/lunges/sit to stand as proxy measures. [Jill Longhurst]

Q: Should acute care staff levels be reduced to essential service levels, to reduce chance of COVID infections to staff/patients?

A: No, we have increased staffing levels to assist with patient flow. We are working to help non-COVID-19 patients get home sooner with increased service. We also have a role to play in the treatment of COVID-19 patients. [Amy Ellis]

A: We are altering our practice to reduce transmission, and avoiding "non-urgent" intervention, but as per CPTBC in response to the MOH order, "For those who are employees of publicly funded health authorities or who are private contractors providing patient and client care in designated facilities or institutions regulated by the Hospital Act, the Health Authorities Act, the Community Care and Assisted

Living Act, the Mental Health Act, or other relevant Acts: please follow the directives of your employer and/or facility/institution. [Jill Longhurst]

Q: Are patients getting US for screening for dilated cardiomyopathy in hospital here?

A: Not that I am aware of here at SMH. [Amy Ellis]

A: I believe there was an article that came out of china, where US was being used. But, I can't seem to locate it at the moment, but I remember scanning it. [Simone Gruenig]

Q: Can you share your perspective as an acute care Physio that would might inspire new graduates to consider a career in Acute care?

A: How much time do you have? This is one topic that is close to my heart and I could talk for a long time if you get me going. I personally find working in acute care very rewarding. To be able to work with patients in such a vulnerable time and help bring them back to function is a privilege. Anyone that is interested in working in public practice is welcome to get in touch with me if they have more questions. I will be working with the MPT 2 class at UBC in May so if they have questions we can chat more then. [Amy Ellis]

A: I'm also a bit biased. I've worked for VCH my entire career. I love the populations I serve in public practice and the teams I work with. [Jill Longhurst]

A: I also can't say enough about public health care and I encourage all students to keep an open mind while in PT school and to try for as much diversity in there placements, as possible. [Simone Gruenig]

Q: Can you discuss the use of the DEMMI as an outcome measure for COVID-19 patient's rehab?

A: We are using it to quantify level of function on initial assessment and being able to monitor change. [Amy Ellis]

A: We have started to look at this in the community. [Simone Gruenig]

Q: Have hospitals considered HCPs bringing in photos of themselves when approaching patients while covered in PPE?

A: We have considered it but it is another thing that would need to be cleaned going out of the room. We are using single use gowns that are yellow and it would not be able to be seen if underneath. [Amy Ellis]

A: It is also something to keep in mind, when working with Indigenous clients and utilizing trauma informed practice. A great webinar to view about this topic is: https://learningcircle.ubc.ca/2020/01/24/mar312020-harley-eagle/ [Simone Gruenig]

Q: Is there a role for breathing exercises in pts with mild COVID (i.e. in the community) to prevent them from deteriorating in days 5-7?

A: There is no evidence to support this. Patients could use the awake positioning protocol to try improve oxygen levels through VQ matching. The deterioration around day 5-7 is associated with the cytokine storm and breathing ex are not able to reverse that. If it was atelectasis or sputum retention we would have more impact. [Amy Ellis]

A: Also keep in mind the role that BE's have on anxiety, and stress. Also, the physiological connection between breath control and anxiety. BE's may not prevent deterioration, but can impact QOL – at all stages of the disease and recovery. [Simone Gruenig]

Q: Are there any precautions for asthma patients?

A: Not in relation to PT treatment beyond monitoring tolerance and considering timing of bronchodilator medications. There is also a move towards using MDIs over nebulisers to reduce aerosol generation. [Amy Ellis]

A: You will notice, that if you review AGP's and the use of nebulisers different documents/resources are conflicted on whether nebulisers are AGP's. [Simone Gruenig]

Thanks to the speakers on the video:

- **Amy Ellis**, BSC, MSC, Registered Physiotherapist
- **Jill Longhurst**, BScPT, Registered Physiotherapist
- **Simone Gruenig**, BSC, MSC, Registered Physiotherapist
- **Jonathon Coelho** (moderator), BSc, MPT, Registered Physiotherapist