

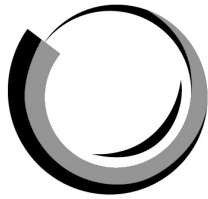
RETURN TO DRIVING AFTER COVID-19

As Covid 19 is new and research is still scarce, much of the information and recommendations are based on effects of Acute Respiratory Disease and Post ICU Syndrome. It is estimated that one third of patients with Acute Respiratory Distress Syndrome and Post ICU Syndrome are unable to return to driving in the first year of recovery¹.

Primary deficits and corresponding interventions

1. Weakness/Fatigue
 - a. Considerations:
 - i. May need to limit to shorter drives
 - ii. Will there be enough energy to drive home after grocery shopping, etc.?
 1. Educate on energy conservation/work simplification techniques
 2. Educate on principles of early rest
 - iii. Possible plantarflexion contractures with patients who have been ventilated and prone for long periods of time
 - iv. Referral to outpatient therapy for PT/OT for gentle strengthening
2. Pulmonary Function
 - a. Considerations:
 - i. Watch for signs of high heart rate and symptoms of O2 desaturation
 - ii. Possibly monitor vitals during evaluation
 1. Pulse oximeter
 2. Blood Pressure cuff
 3. Heart Rate monitor
 - iii. Educate on importance of frequent and early rest
3. Transfer/Ambulation deficits
 - a. Considerations:
 - i. Evaluate transfers and standing/walking
 - ii. Educate on knowing limitations and how much walking will sap their energy – may affect return drive
4. ADL/IADL
 - a. Considerations:
 - i. Readiness for driving due to fatigue if difficulty with ADL

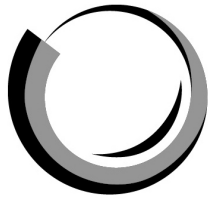
¹ *Home and Community-Based Physical Therapist Management of Adults with Post-Intensive Care Syndrome: Physical Therapist Management of Adults With PICS Musculoskeletal Perspective* James M. Smith, Alan C. Lee, Hallie Zeleznik, Jacqueline P. Coffey Scott, Arooj Fatima, Dale M. Needham, Patricia J. Ohtake



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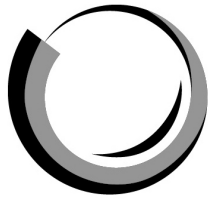
- ii. Cognitive status if difficulty with IADL
- 5. Cognitive deficits (60% have continued cog deficits at 1-year f/u)
 - a. Considerations
 - i. Poor executive function – concentration, processing speed, higher level decision making
 - ii. Possible referral to Occupational Therapy or Speech Therapy to address cognitive deficits prior to returning to driving
- 6. Psycho-social effects (commonly reported, continue 1-year post)
 - a. Considerations
 - i. Anxiety/depression/PTSD may affect ability to safely drive
 - ii. Deep breathing techniques to manage symptoms
 - iii. Meditation (apps: Calm, 10% Happier, etc.; online guided meditation)
 - iv. Referral to Rehab Psychology as appropriate
- 7. New medications
 - a. Considerations
 - i. May cause drowsiness
 - ii. May negatively impact cognitive ability
- 8. Sleep Deficits
 - a. Considerations
 - i. Hypersomnia or Insomnia
 - 1. Danger of driving drowsy
 - 2. Possible training in sleep hygiene strategies for insomnia
- 9. Other Symptoms (based on Johnell's experience)
 - a. Possible difficulty regulating body temperature
 - i. Pay attention to temperature of clinic and vehicle
 - ii. Have a layer handy that patients can borrow and you can easily wash afterward
 - b. Possible nausea/vomiting
 - i. Discuss with patient prior to behind the wheel to determine triggers and likelihood of a vomiting episode
 - ii. Have a stash of emesis bags in the car
 - iii. Have wipes in the car for cleanup
 - iv. Be mindful of places you can pull over if necessary



References

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2. Pulmonary Function

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- For Survivors of Severe COVID19, beating the virus is just the beginning <https://www.sciencemag.org/news/2020/04/survivors-severe-covid-19-beating-virus-just-beginning>

3. Transfer/Ambulation deficits

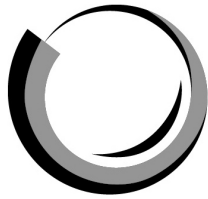
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4. ADL

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5. IADL

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6. Cognitive deficits

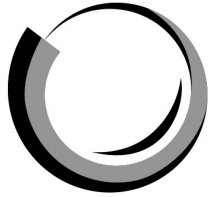
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<https://www.sciencemag.org/news/2020/04/survivors-severe-covid-19-beating-virus-just-beginning>

7. Psycho-social effects

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- A psychiatric services response to the COVID-19 crisis:
<https://www.kevinmd.com/blog/2020/03/a-psychiatric-services-response-to-the-covid-19-crisis.html>

8. Job loss, change in occupation, decreased hours – lost earnings

- *Home and Community-Based Physical Therapist Management of Adults with Post-Intensive Care Syndrome: Physical Therapist Management of Adults With PICS Musculoskeletal Perspective*.
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9. Return to driving concerns

- *Home and Community-Based Physical Therapist Management of Adults With Post-Intensive Care Syndrome: Physical Therapist Management of Adults With PICS Musculoskeletal Perspective* Article (awaiting publication) James M. Smith, Alan C. Lee, Hallie Zeleznik, Jacqueline P. Coffey Scott, Arooj Fatima, Dale M. Needham, Patricia J. Ohtake
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