The Role of Occupational Therapy with Individuals Diagnosed with ALS and Respiratory Failure in the ICU

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LEHIGH VALLEY HEALTH NETWORK

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Objectives

1. Individuals will be able to identify when an occupational therapy consult should be placed for individuals with ALS and respiratory failure in the ICU.
2. Individuals will be able to describe 3 interventions that occupational therapists may perform in the ICU for patients diagnosed with ALS and respiratory failure.

45-year-old male

Admitted to the ICU with respiratory failure secondary to COVID-19.

- Hx: ALS (non-verbal, uses eye gaze system)
- Baseline function: dependent self-care tasks, assist x1 to transfer to power wheelchair
- Code Status: DNR/DNI
- Baseline O2 requirements: nocturnal non-invasive ventilation
- O2 requirements on admission: 24-hour dependence on NIPPV
- Other: +dysphagia, tube feed placed

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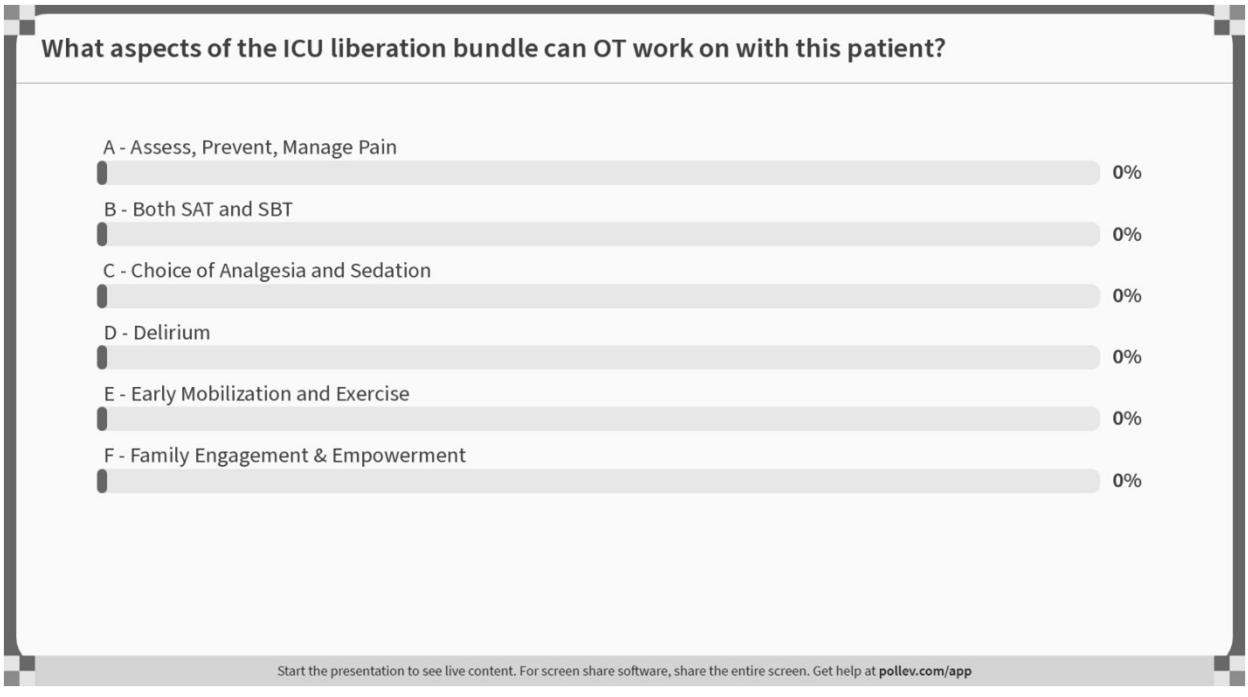
Where to start?

- How can we minimize/prevent hospital-acquired complications?
  - Weakness
  - Skin breakdown
  - Delirium
- Multi-disciplinary approach to treatment
  - OT, PT, SLP, nutrition services, RRT, neurology (ALS team)
- Goal = patient D/C ICU and returns home with family



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Occupational Therapy

- What is OT's role?
  - Engagement in occupational performance
    - Enjoys using electronic device, sitting OOB
  - Communication
    - Eye gaze system
  - Early mobility
    - OOB to chair
  - Delirium assessment/prevention/management
    - Assess daily, environmental modifications, orientation
  - Pulmonary toileting
    - Positioning, OOB activity, encourage strong cough

OT Evaluation

- Completed within 48 hours of admission
- Patient was on continuous NIPPV
- Formal assessments
  - CAM-ICU = negative
  - AM-PAC Mobility = 6/24, dependent all functional mobility
- Interventions initiated on evaluation:
  - Family/patient/RN education
  - Seated EOB
    - Closely monitored vitals
  - Environmental modification
    - Blinds open
    - Eye gaze turned on and set-up to use
  - Positioning
    - Seated upright (chair mode) in bed

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OT Treatments

- 6 treatment sessions over course of 18-day hospitalization
- Early mobility
  - Progressed to stand pivot as appropriate to OOB to chair
  - Encouraged pulmonary toileting
- Continued delirium assessment
  - CAM-ICU
- No adverse safety outcomes
- Challenged patient to use eye gaze to communicate needs during session
- Worked with respiratory therapy to plan OOB activity on increased O2 support
- Nursing present – education on safe mobilization

Results

- Patient progressed from dependent stand pivot transfers to moderate assistance x1 (wife was able to complete with patient)
  - As mobility progressed with OT, frequency of OOB with nursing team increased
- Tolerated activity on 2 L O2 via NC; discharged on room air
- CAM-ICU = negative throughout hospitalization
- Patient communicated independently with staff using eye gaze system
- Patient and wife reported increased QOL while in ICU
- Discharged home with spouse

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Conclusions

- OT consults may benefit this patient population
- Placing consults early allows for earlier intervention
- Occupational therapists use a holistic approach to care and promote a culture of empowerment, add meaning to their ICU stay
- OT in ICU may be safely initiated on increased O2 demands
  - Key: communication with interdisciplinary team
- Patient-centered care
  - Why is this important?

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Questions?

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