Background and Purpose

Bacterial meningitis is a serious disease that causes acute inflammation of the meninges, the lining of the brain and spinal cord, which can result in significant morbidity and mortality.\(^1\)
- 15,000 to 25,000 cases in the US yearly
- One of the top 10 causes of infection-related deaths worldwide.\(^1\)

Bacterial meningitis is commonly complicated by encephalitis, inflammation of the brain parenchyma.\(^1\)
- 30% to 50% of survivors of bacterial encephalitis sustain neurological sequelae.

Neurological sequelae include:
- Memory loss
- Behavioral disorders
- Speech disorders
- Difficulty concentrating

Patient History

52-year-old female arrived to the ICU
- Intubated, Unresponsive, Paralyzed
- Required ventriculostomy placement
- Dx: Encephalitis secondary to bacterial meningitis

Prior to admission
- Independent at home and in the community
- Lived alone in a single level home
- Worked full-time as a Certified Occupational Therapy Assistant (COTA)
- Unknown how patient contracted bacterial meningitis

Past Medical History
- Glucose intolerance
- Anxiety
- Obstructive sleep apnea
- Alcohol abuse
- Remote history of drug abuse

Discussion

- The patient demonstrated improvement with strength, cognition, problem solving, and balance.
- She demonstrated increased independence with bed mobility, transfers, sitting balance, standing balance, and ambulation.
- The patient was safely discharged from the ICU to the Inpatient Rehabilitation Unit.

Conclusion

- Limited research regarding PT in the ICU for patients diagnosed with encephalitis secondary to bacterial meningitis
- Future research is needed in order to attain a better PT prognosis for this patient population.

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Overview

- Task-Oriented Training to Restore Independence in a Patient with Encephalitis in the Intensive Care Unit: A Case Report
- University of New England, Doctor of Physical Therapy Program, Portland, Maine
- Victoria Perez, BS, DPT Student

Goals

Short-Term Goals: GOALS MET
- Minimal Assistance Bed Mobility
- Supervision Sitting Edge of Bed
- 1 Person Moderate Assistance Standing
- Supervision with Transfers
- Moderate Assistance with Ambulation and FWW

Long-Term Goals: GOALS UNMET
- Independent Bed Mobility
- Independent Transfers
- Independent Gait/Ambulation

Interventions

- Bed Mobility
- Scooting
- Sitting Balance
- Standing Balance
- Transfers
- Gait Training

Prognosis

Good Medical Prognosis; Unknown PT Prognosis; Positive Factors:
- Age
- Prior Level of Function
- Negative Factors:
- Acuity of Illness
- Impaired Cognition & Motor Control

IE Impairments:
- Bed Mobility
- Balance
- Transfers
- Ambulation
- Cognition
- Incontinence
- Motor Control

IE Limitations:
- Self-Care
- Social Roles
- Home Management
- Activities of Daily Living

Outcomes

- Bed Mobility
  - Max Ax2
- Min Ax1
- Scooting
  - Max Ax2
  - Min A
- Sitting Balance
  - Max Ax2
  - Independent
- Standing Balance
  - Max Ax3
  - Mod Ax1
- Transfer
  - Did Not Occur
  - Supervision
- Gait Training
  - Did Not Occur
  - Mod Ax1

DC Impairments:
- Dizziness

DC Limitations:
- Social Roles
- Home Management
- IADLs