

## BACKGROUND

- Cerebral Palsy (CP) is a non-progressive neuromuscular condition with onset during fetal life or developmental years
- Incidence rate: 1 per 500 live births
- Gait impairments, spasticity, decreased balance, fatigue are common
- People with CP are living longer with advances in medicine, surgery, and related health care services
- 25-40% of adults with CP report loss or decline in independent mobility
- Non-ambulatory adults with CP report more pain than ambulatory adults 79% vs. 48%
- 1 out of 5 elderly adults with CP ≥ 65 years of age will use physical therapy

## PURPOSE

- To bring awareness in the gap in literature regarding specific interventions for this population in physical therapy by providing management example

## CASE DESCRIPTION

- A 60-year-old male Gross Motor Function Classification System (GMFCS) Level III
- Ambulating with Lofstrom crutches
- Bilateral ankle edema; side effect from Baclofen, resulted in increased foot drop
- Goal was to prevent wheelchair use



## INTERVENTIONS



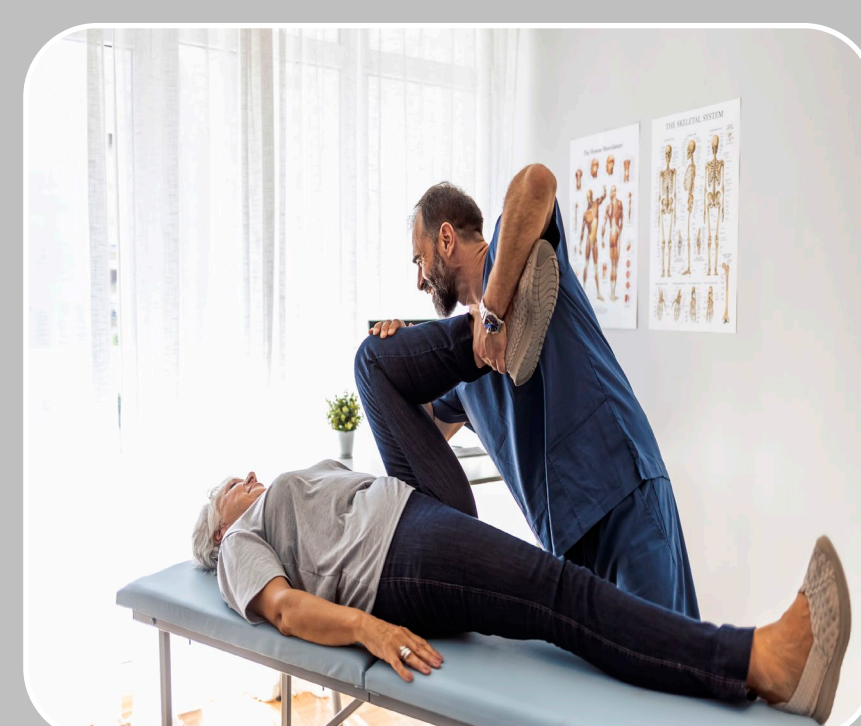
### Clinton Platform Mounted Parallel Bars

- Toe Taps on Airex using Parallel bars
  - 30 steps bilateral
- Lateral Stepping on Airex using Parallel Bars
  - 30 step ups bilateral



### Clinical Reformer®

- Bilateral Leg Presses
  - Medium resistance/30 repetitions
- Single Leg/ Leg Presses
  - Light to medium resistance/ 30 repetitions



### Passive Manual Stretch

- Lower Extremities
  - Hamstrings, quadriceps, calves, planter flexors, and hip adductors
- 60 sec hold/3 reps each

## OUTCOMES

### Patient Self-Reported

- Improvements in endurance
- Increased community ambulation distance
- Improved foot clearance

### Ideal Intervention Conditions

- Patient performed interventions best under these conditions:
  - Pitting Edema Trace (1+)
  - Borg RPE 10-12

### Assistive Device

- Lofstrom crutches
- Wheelchair use avoided

## DISCUSSION

- Strengthening on a reformer, a dedicated stretching program and balance activities assisted an older adult with CP in prolonging his independent ambulation during a 10-week period

## CONCLUSION

- Physical Therapists should become aware of interventions on how to manage the aging patients with CP and the increasing declines in mobility
- Patient continued ambulating with Lofstrom crutches
- Wheelchair use avoided
- Baclofen dosage was decreased by patient's physician, decreased edema was a contributing factor to better ambulation
- Future case reports in this population should incorporate outcome measures such as the TUG and 2-minute walk test

## REFERENCES

