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Occupational Therapy

The Benefits of Receiving Occupational Therapy for Lymphedema Management

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Background and Problem

- Self-confidence and adherence to self-care practices facilitates volition (Rubio et al., 2022).
- Developing exercises simulating meaningful tasks while employing proprioceptive neuromuscular facilitation (PNF) frame of reference during complete decongestive therapy (CDT) increases client motivation (Atef et al., 2020 & Munoz-Alcaraz et al., 2020).
- Lymphedema certification is obtained by various professionals; therefore, it's important to emphasize if receiving OT has positive outcomes for lymphedema management (Moreno-Chaparro, et al., 2018).

Purpose/Aim/Question

- The purpose of the project is to emphasize the OT profession in lymphedema treatment by enhancing the client's occupational performance and improving functional outcomes.

Method

Setting: Hospital affiliated outpatient therapy clinic providing speech, PT and OT.

Participants: Client with left upper extremity (LUE) lymphedema.

Instruments: Canadian Occupational Performance Measure (COPM), Lymphedema Life Impact Scale (LLIS), compliance chart, tape measure, and dynamometer.

Procedures: COPM and LLIS conducted as pre/post assessment to identify occupational performance challenged by lymphedema. Tape and dynamometer measurements were utilized to assess limb volume and left-hand strength. Client centered exercises were implemented during CDT and for home exercise programs (HEP). A compliance chart monitored lymphedema management and HEP facilitation. Eight-weeks of CDT was provided with weekly outcome measure analysis.

Data Analysis: Positive outcomes will be determined by addressing the client's occupational performance problem (OPP). A total score of >5 in "satisfaction" and/or "performance" in the COPM and a decrease in the LLIS impairment score will be collected from subjective data regarding physical, psychosocial and functional factors. An increase in grip strength will be measured and a compliance chart will reflect the number of days/hours bandages are worn in home/community contexts.

Results

- The charts reflect data analysis collected from OT lymphedema program while implementing exercises for meaningful occupations based on one client.

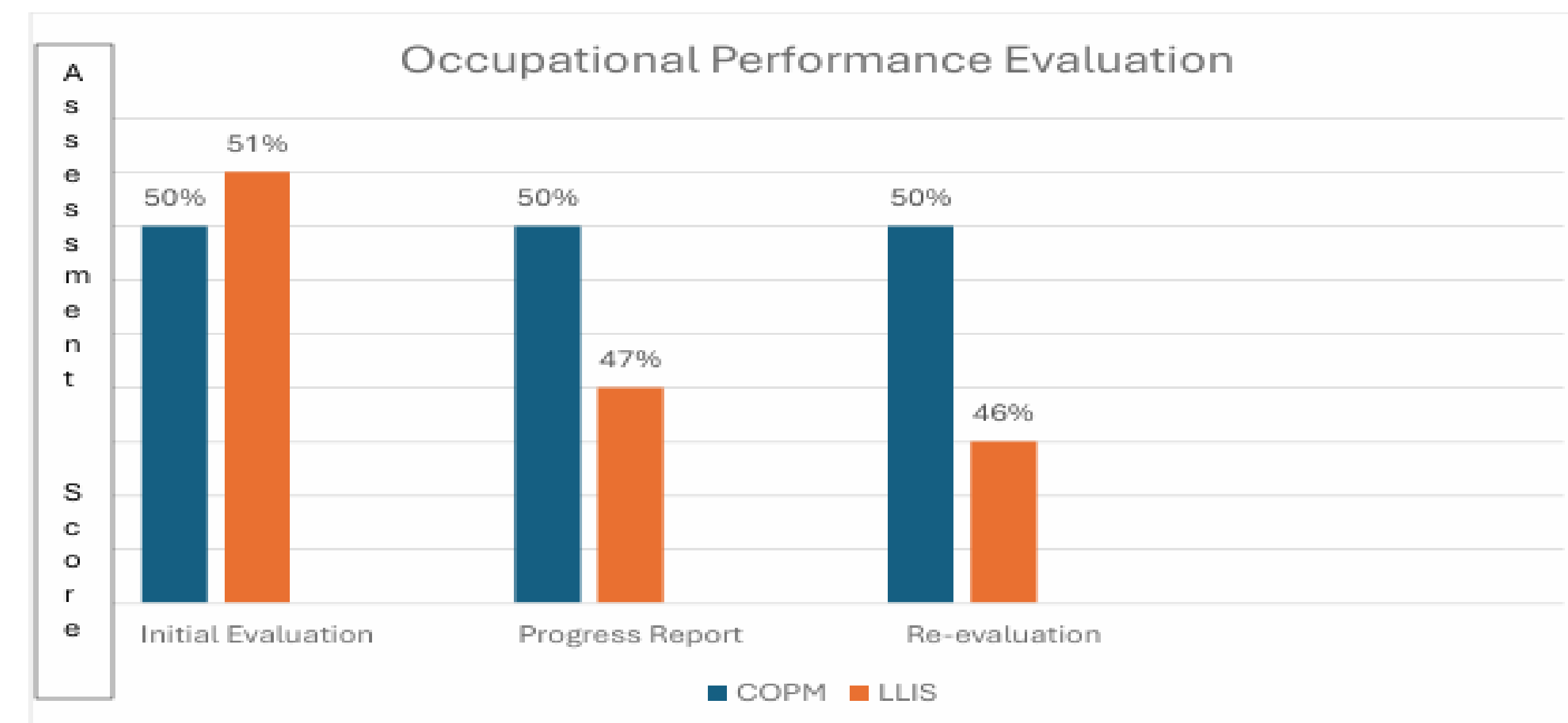


Table 1. Data collection of limb volume measurements for a duration of 24 treatment days equivalent for a duration of an estimated 8-week period.

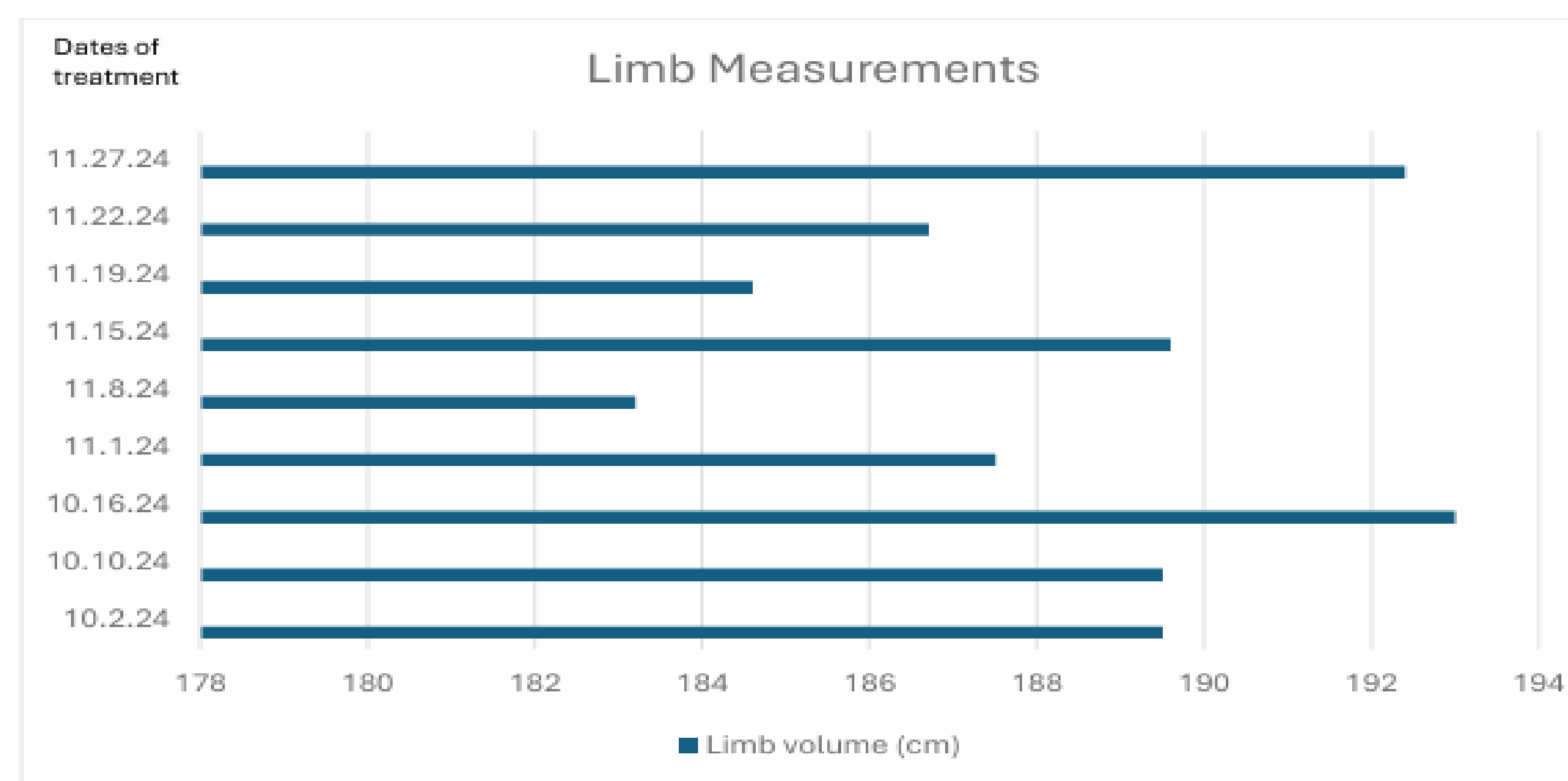


Table 2. Data collection of limb volume measurements for a duration of 24 treatment days equivalent for a duration of an estimated 8-week period.

Lymphedema Compliance Chart

	12am	1-2am	2-3am	3-4am	4-5am	5-6am	6-7am	7-8am	8-9am	9-10am	10-11am	11am-12am	12-1pm	1-2pm	2-3pm	3-4pm	4-5pm	5-6pm	6-7pm	7-8pm	8-9pm	9-10pm	10-11pm
Su																							
M																							
T	10:15	10:15	10:15													10:14	10:14	10:14	10:14	10:14	10:14	10:14	10:14
W																							
Th	10:15	10:15	10:15	10:15	10:15	10:15	10:15	10:15	10:15	10:15	10:15	10:15	10:15	10:15	10:15	10:15	10:15	10:15	10:15	10:15	10:15	10:15	
F	10:15	10:15	10:15	10:15	10:15	10:15	10:15	10:15	10:15	10:15	10:15	10:15	10:15	10:15	10:15	10:15	10:15	10:15	10:15	10:15	10:15	10:15	
Su																							
M																							
T	11:4	11:4	11:4	11:4	11:4	11:4	11:4	11:4	11:4	11:4	11:4	11:4	11:4	11:4	11:4	11:4	11:4	11:4	11:4	11:4	11:4	11:4	
W	11:6	11:6	11:6	11:6	11:6	11:6	11:6	11:6	11:6	11:6	11:6	11:6	11:6	11:6	11:6	11:6	11:6	11:6	11:6	11:6	11:6	11:6	
Th	11:2	11:2	11:2	11:2	11:2	11:2	11:2	11:2	11:2	11:2	11:2	11:2	11:2	11:2	11:2	11:2	11:2	11:2	11:2	11:2	11:2	11:2	
F	11:8	11:8	11:8	11:8	11:8	11:8	11:8	11:8	11:8	11:8	11:8	11:8	11:8	11:8	11:8	11:8	11:8	11:8	11:8	11:8	11:8	11:8	
Su																							
M																							
T	11:19	11:19	11:19	11:19	11:19	11:19	11:19	11:19	11:19	11:19	11:19	11:19	11:19	11:19	11:19	11:19	11:19	11:19	11:19	11:19	11:19	11:19	
W	11:20	11:20	11:20	11:20	11:20	11:20	11:20	11:20	11:20	11:20	11:20	11:20	11:20	11:20	11:20	11:20	11:20	11:20	11:20	11:20	11:20	11:20	
Th																							
F																							
Sa	11:16	11:16	11:16	11:16	11:16	11:16	11:16	11:16	11:16	11:16	11:16	11:16	11:16	11:16	11:16	11:16	11:16	11:16	11:16	11:16	11:16	11:16	

Table 3. Number of days client tolerated bandages

Dynamometer Measurements

Right hand grip strength:
10.2.24: 55lbs
11.20.24: 60lbs

Left hand grip strength:
10.2.24: 40lbs
11.20.24: 50lbs

Conclusions

The results concluded the following:

- Significant difference in a decrease of total limb volume when wearing bandages between 48-96 hours.
- Bandages worn for <48 hours indicated no decrease in total limb volume.
- Volition increased when adhering to compliance chart which facilitated a decrease in total limb volume.
- No change in COPM scores regarding satisfaction/performance on OPP.
- A 5 percent decrease in LLIS impairment score indicated a change in "strength" in swollen limb and an improvement in "sleep".
- Increase of grip strength in both UE. +5 lb. increase in RUE and +10 lb. increase in LUE as per dynamometer results.

Implications for Occupational Therapy

Occupation based exercises and/or activities implemented into a lymphedema program should be client-centered, therefore, it is important to emphasize on the components of the OTPF and the scope of practice that is unique to the profession. The OT profession specializes in evaluating the mind-body-spirit connection on occupational engagement and participation that facilitates quality of life (QOL) in diverse domains. OT practitioners are skilled at identifying the occupations that are challenged due to chronic or acute conditions.

The occupation of health management and its components such as social/emotional health, symptom/condition management, personal care device management, and physical activity is the derived focus for OT lymphedema treatment (Lieberman 2020).

References

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