AURA

CASE STUDY:
Physical Therapy – Chronic Right Wrist Pain

DEMOGRAPHIC

Patient was a 46-year-old that presented to physical therapy with complaints of chronic right wrist pain. Upon examination, the patient demonstrated with a right carpal ligament sprain, which impaired ADLs (Activities of Daily Living) and work-related tasks.

Grade of sprain was not determined via MRI imaging, but signs and symptoms were consistent with a Grade 2 Sprain.

TREATMENT PROTOCOL

Physical therapy initially immobilized the patient's wrist during all activities to reduce the stress placed on ligaments, and to help promote healing. In addition to immobilization, manual therapies and therapeutic exercise, the physical therapist immediately initiated PEMF therapy to aid in ligament healing.

PEMF PROTOCOL

PEMF Machine - **Aura Wave**

PEMF SPECIFIC SETTINGS

Frequency: 2x/week

Equipment: Small butterfly loop

Location: Butterfly loop placed around right wrist and fastened with stabilization belt

Time: 20 minutes per session

Intensity: 15

Total sessions: 16 sessions

RESULTS

Weeks 1-2 (4 total PEMF sessions):

- Patient wore the wrist immobilization brace at all times except for sleeping and bathing.
- Pain Report: **Highest with activity: 8/10**

Weeks 3-4 (4 total PEMF sessions):

- Initiated weaning from brace with ADLs around the house, but continued to wear brace with all work-related tasks
- Pain Report: **Highest with activity: 6/10**

Weeks 5-6 (4 total PEMF sessions):

- Therapy weaned the patient from the immobilizer with light work related tasks but immobilizer continued to be worn with strenuous work related duties.
- Pain Report: **Highest with activity: 5/10**

Weeks 7-8 (4 total PEMF sessions):

- Complete removal of wrist immobilization with all ADLs and work related tasks
- Pain Report: **Highest with activity: 2/10**

CONCLUSION

Based on our findings, we can suggest that implementing Aura / PEMF into a physical therapy plan at onset of care may accelerate healing of patients experiencing wrist ligament injuries. This conclusion was based on the standard healing timeframes associated with this injury and similar injuries. Further research is needed to determine if there are more optimal PEMF settings to facilitate faster healing in regards to patients with wrist ligamentous injuries.