



CASE STUDY:

Chiro – Upper Shaft Fibula Oblique Fracture

CHIROPRACTOR

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DEMOGRAPHIC

Patient is a 17 year old male lacrosse player. He presented to our office with a non-displaced upper shaft fibula oblique fracture. His injury occurred while playing lacrosse 10 days prior to presenting in the office. Patient presented in a soft cast with walking boot and full weight bearing.

TREATMENT PROTOCOL

Treatments included the use of Class IV Therapeutic laser along the fracture site to promote healing, decrease pain, reduce swelling. In addition to laser, immediate Pulsed ElectroMagnetic Frequency (PEMF) to help with pain relief and increased bone healing.

PEMF PROTOCOL

PEMF Machine - **Aura Wave**

PEMF SPECIFIC SETTINGS

Frequency: Daily for 11 weekdays

Equipment: Small butterfly loop and medium loop

Location: Loops were double wrapped around the lateral calf/ fibular fracture site.

Time: 30 minutes per session

Intensity: Range between 13-18

Total Session: 11 Sessions

RESULTS

First 5 weekdays (5 Sessions):

Patient had VAS of 5/10 at the start of treatment. Patient noticed a decrease in pain to a 2/10 by the end of the 5 sessions with decreased swelling, and point tenderness of 2/10. Patient was able to perform calf raises and squats with hesitation and only able to perform 15 of each with some fatigue.

Second 6 Sessions:

Patient presented full weight bearing with a VAS of 1/10. By the end of the 6th session, patient was able to perform full calf raises, squats, approximately 25 with a VAS of 0/10. Swelling was gone, point tenderness was a 1/10.

CONCLUSION

Based on our findings, our results, we can suggest that implementing PEMF into an injury recovery, physical therapy plan of care may accelerate healing, pain relief, and swelling of an injury. Pre and post X-rays show significant accelerated healing of the fracture site. Further research is needed to determine if there are more optimal PEMF settings to facilitate faster healing and decreased pain to patients with fractures.

