



SOT Cranial Therapy with an Occlusal Splint for the Treatment of Fibromyalgia and Obstructive Sleep Apnea with Blocked Sinus

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INTRODUCTION

Fibromyalgia is a disorder characterized with widespread musculoskeletal pain in specific locations (trigger points), stiffness, cognitive dysfunction, sleeping disturbances and fatigue. It is believed to be a disorder of central pain processing that produces paresthesias such as heightened responses to painful stimuli and pain with non-painful stimuli.¹

Disturbed sleep can be a key factor for the pathogenesis of fibromyalgia. Obstructive sleep apnea (OSA) occurs when there is an obstruction in the airway and is also associated with disturbances of sleep and associated reduced pain threshold levels.²

ASSESSMENT

A 47-year-old female patient presented for chiropractic care with a 13-year history of temporomandibular joint pain (TMJ) rated as a 8/10, disturbances in vision, restricted nasal breathing, fibromyalgia, chronic fatigue, excessive daytime sleepiness, “stone-like” muscles, “vice-like” headaches, cognitive impairments, insomnia, chronic myofascial neck and shoulder pain, low back pain with radiculitis with paresthesia bilaterally into her legs and feet.

METHODS

- Examination revealed narrow transverse upper dental arches, anterior premature contact, maxillary bone deficiency with exostosis, decreased TM joint translation of right TMJ with palpatory pain, and clicking. Cervical ROM was limited and painful, foraminal compression positive for right localized C5 pain, bilateral posterior sacroiliac pain at 70 degrees elevation, left temporal bone restricted in extension with sphenomaxillary distortion.
- Pre-Treatment Sleep Study: Respiratory Disturbance Index 26 (5.4/hour), Apnea Hypopnea Index 26, Oxyhemoglobin Saturation 96%.
- Treatment consisted of eight sacro occipital technique (SOT) cranial dental appointments incorporating SOT, SOT intraoral cranial adjustments, sphenomaxillary craniopathy, and neuro emotional technique (NET) for stress related symptoms.
- Dental collaborative care consisted of a lower mandibular Gelb splint fabricated by dentist two weeks into care and modified immediately following SOT cranial techniques.

RESULTS

TMJ pain was decreased to 1/10, the patient discontinued taking amitriptyline. Sleep improved with the patient sleeping seven hours without interruptions. The patient was able to breathe freely through both nostrils without any restrictions.

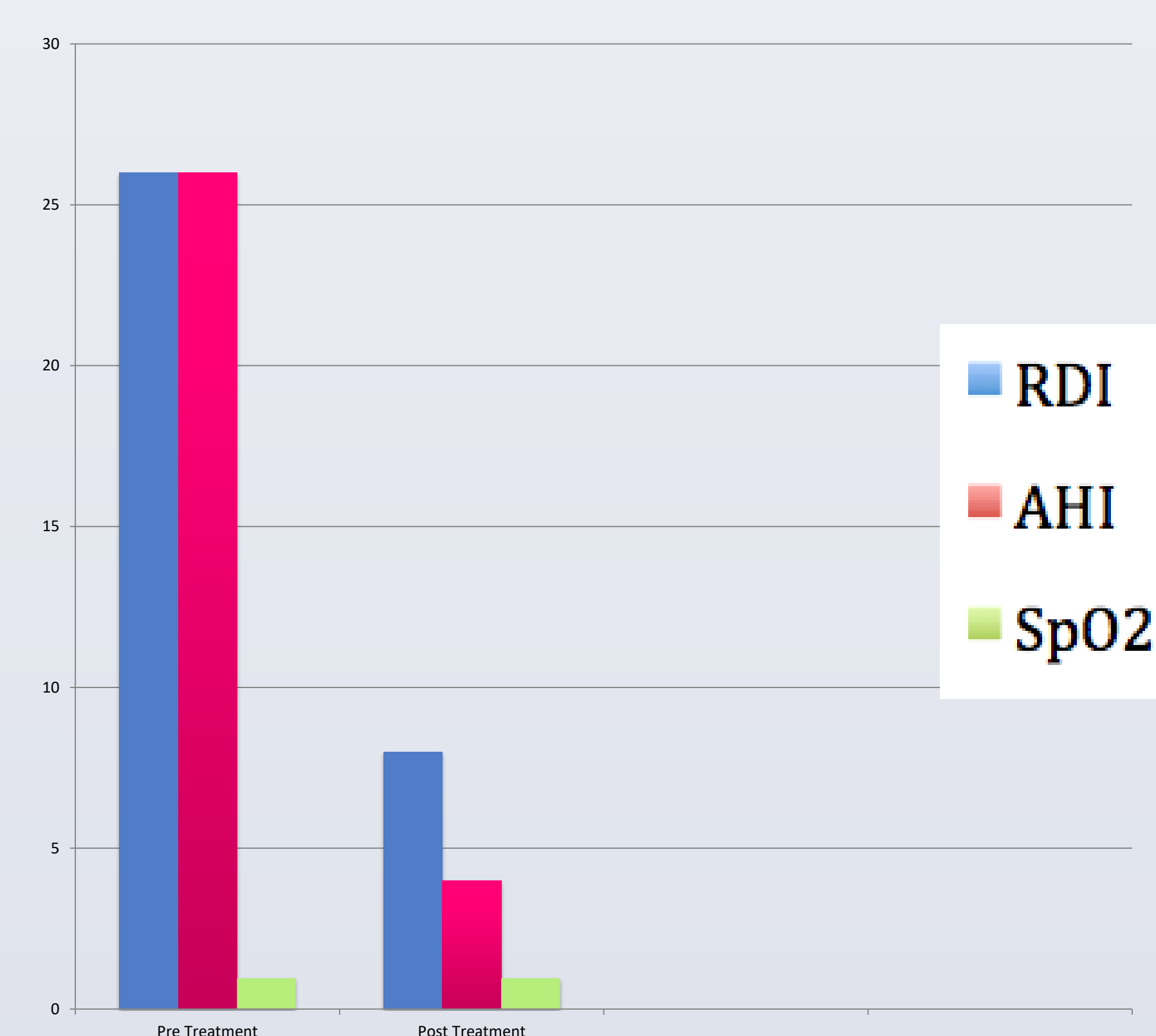


Table 1. Pre and post treatment measuring RDI, AHI, and SpO2

Chronic low back, neck and headaches resolved with care. She was able to hike seven miles and climb 27 floors with no burning in legs. Fibromyalgia trigger points decreased from 9 to 2/10. Increased mental clarity, decrease in fatigue, and an increase in overall well-being were noted. Post Sleep Study noted a significantly improved respiratory disturbance index of 8 and apnea hypopnea index of 4 as compared to a prior respiratory disturbance index of 26 and apnea hypopnea index of 26

DISCUSSION

One study determined that OSA patients may lack depth of sleep, and this lack of sleep causes fibromyalgia like symptoms in otherwise healthy individuals.³ Also, it is fairly common that fibromyalgia patients suffer sleep disorders, that are considered similar to those of OSA patients⁴ with disorders of sleep patterns being an important feature in the pathogenesis of their fibromyalgia condition.

CONCLUSION

Greater study is needed to identify the subset of OSA patients with concomitant TMD and fibromyalgia symptomatology that could benefit from this approach. Ideally in conditions where a patient does present with OSA and fibromyalgia and is resistant to using a continuous positive airway pressure (CPAP) therapy, the methods utilized in this case may offer another option.

REFERENCES

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