

Effect of Multi-Level Radiofrequency Tissue Ablation on Occupational Impact in Patients with Mild to Moderate OSA



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BACKGROUND

- Obstructive sleep apnea (OSA) impairs function at work
- Effect of treatment not tested

OBJECTIVE

To evaluate the effect of OSA treatment (RF) on occupational impact

METHODS

- Design: Randomized controlled trial and long term Case Series
- Population: 59 patients with mild to moderate OSA
 - RCT- patients randomized to radiofrequency (RF) or sham-placebo
 - Case series- RCT patients who received RF during clinical trial or offered after
- Intervention: RF, multilevel
- Outcome: Occupational Impact domain of Symptoms of Nocturnal Obstruction and Related Events (SNORE-25) at baseline and follow up
 - RCT- 8 weeks
 - Case series- 2 years
- Analysis:
 - RCT- Student's t-test
 - Case Series- paired t-test

SNORE-25: OCCUPATIONAL IMPACT DOMAIN

Rate on 0 - 5 scale, 5 is the worst

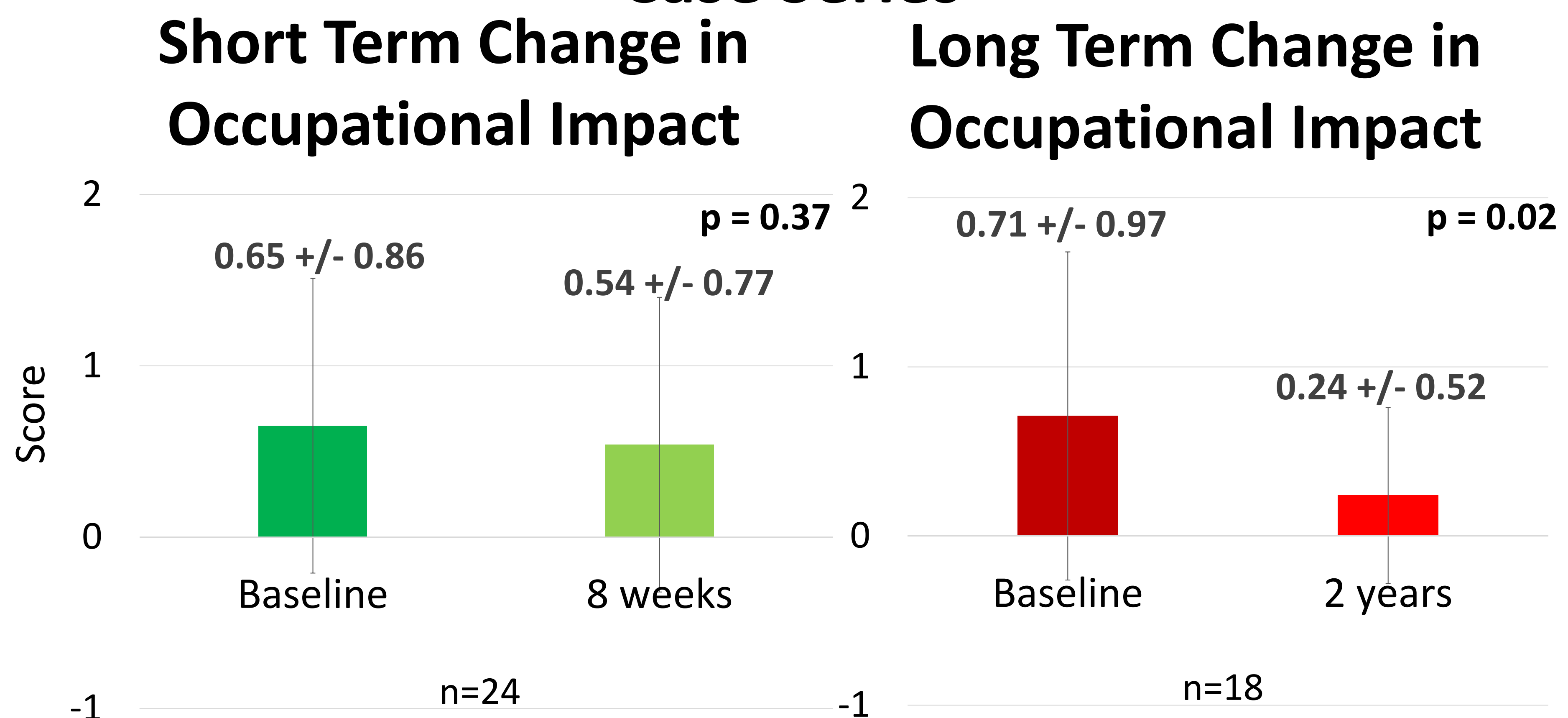
- Competence questioned
- Reliability questioned
- Modification in your job due to illness (for ex: someone else driving the car for you, inability to participate in meetings because of excessive sleepiness)

RESULTS

Randomized Controlled Trial Change in Occupational Impact

	Radiofrequency (n=24)	Sham-Placebo (n=28)	P-value
Change in score	-0.11 +/- 0.75	-0.14 +/- 0.81	0.87

Case Series



DISCUSSION

- The change in occupational impact between the RF and sham-placebo arms was not significant ($p = 0.87$)
- In RF treated patients
 - At 8 weeks, the improvement in occupational impact score was not statistically significant ($p = 0.37$)
 - **At 2 years, the improvement in occupational impact score was statistically significant ($p = 0.02$)**
- Limitations: level of evidence as case series, low follow up rates, SNORE-25 developed as QOL instrument

CONCLUSION

RF, in mild to moderate OSA, improves workplace outcomes in the long term.

IMPLICATIONS

- This study helps to support the conclusion that OSA treatment improves workplace outcomes
- Results warrant further investigation with validated measures into work productivity outcomes in OSA following other treatments



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