Floatation Therapy for chronic headaches

A case study evaluating floatation therapy for chronic headaches

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Background

Chronic headaches and head pain can be distracting, disabling, consuming and significantly affect day to day quality of life. A headache is a generic term encompassing many categories including cluster, migraine, allergy/sinus, tension, TMJ, hormone, caffeine, exertional, hypertension, food allergy, rebound, post-traumatic and more. Our cell phone society makes matters worse for headaches, with eye strain, blue light and the stress of constant news and social feeds.

Headache triggers are not always obvious and may include lifestyle factors such as unknown allergies to routinely consumed foods, or the contribution of work, sleep environments or personal habits that fuel the problem. Further, headache "medicine" does not necessarily mitigate all the various contributing causes and can even be a part of the problem.

Chronic headaches often necessitate strong medications, including opiates. This puts further strain upon a medical society already entangled in a pain management crisis. Options and alternatives to medications are now on the rise and gaining attention. One option that has been showing tremendous promise is that of float therapy, or floating.

Objective

The objective of this case study is to observe the effects of four (4) weeks of float therapy upon the intensity and frequency of chronic headaches, irrespective of the type of headache, and the collateral/related effects of sleep, anxiety, focus/productivity, activities of daily living, hearing and vision.

A second objective is to determine if there is any difference between floating one (1) vs. two (2) times a week for the same time period.

Method

Participants were sought through an online screening process based on the following criteria:

(a) chronic headaches for more than 1 year (self-rated as greater than 5 on a numerical 0-10 pain scale with 0=none and 10 =extreme pain);
(b) no prior history of floating;
(c) no surgery for this condition;
(d) not taking opioids, and
(e) not currently receiving medical treatment or alternative medicine intervention including injections or therapy.

Of 75 applicants, only 14 fit the criteria and were accepted into the study. Of those 14 selected, eight (8), all female, elected to participate. They were then randomly divided into two equal groups.

Some or all of the participants indicated differing levels of associated factors such as vision and hearing issues. All had some level of anxiety, sleep issues, and affect on work and activities of daily living. There were a variety of types of headaches as well as physiologic differences. Regardless of etiology, all of the participants had tried a variety of pain management and lifestyle approaches, other than floating.

The intervention for this case study involved "floating" in a 9' long x 5' wide fiberglass tank with a hinged lid, shaped like a large egg and filled with 175 gallons (10" deep) of a salt solution. This solution contains 1000 pounds of medical grade Epsom salt, or magnesium sulfate ($MgSO_4$) and is maintained at skin temperature (approximately 94 degrees F). The tank is within a private room containing a shower. To "float" the individual disrobes, showers, inserts earplugs, turns off the overhead room light, then climbs inside the tank which has an internal light and music controls. The individual closes the float tank lid and then transitions onto a supine (face up) position and begins to float effortlessly.

The study lasted four (4) weeks in duration[1] and involved two random groupings of four participants per group. Group A floated once a week for four weeks for a total of 4 floats. Group B floated twice a week for four weeks, for a total of 8 floats. A daily subjective survey was completed by each individual, using a numeric scale on a 0-10 continuum with descriptors. This month long daily survey was initiated on day (1) one of the study, regardless of the day of their first float in week(1) one. For purposes of comparison, a baseline survey with the same questions was completed by the participants prior to their first float.

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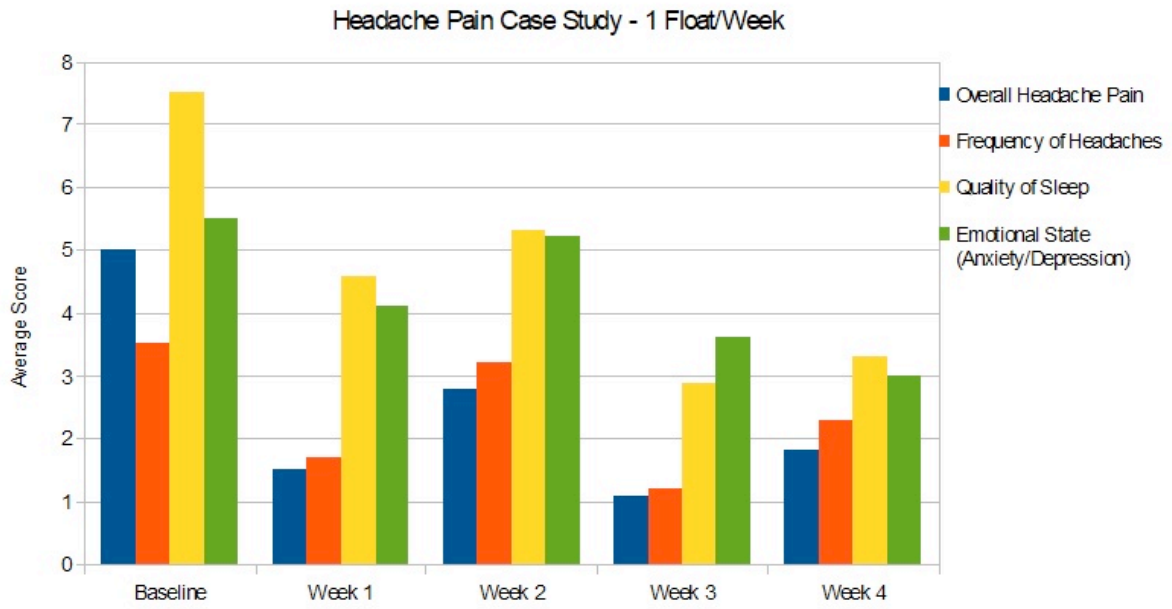
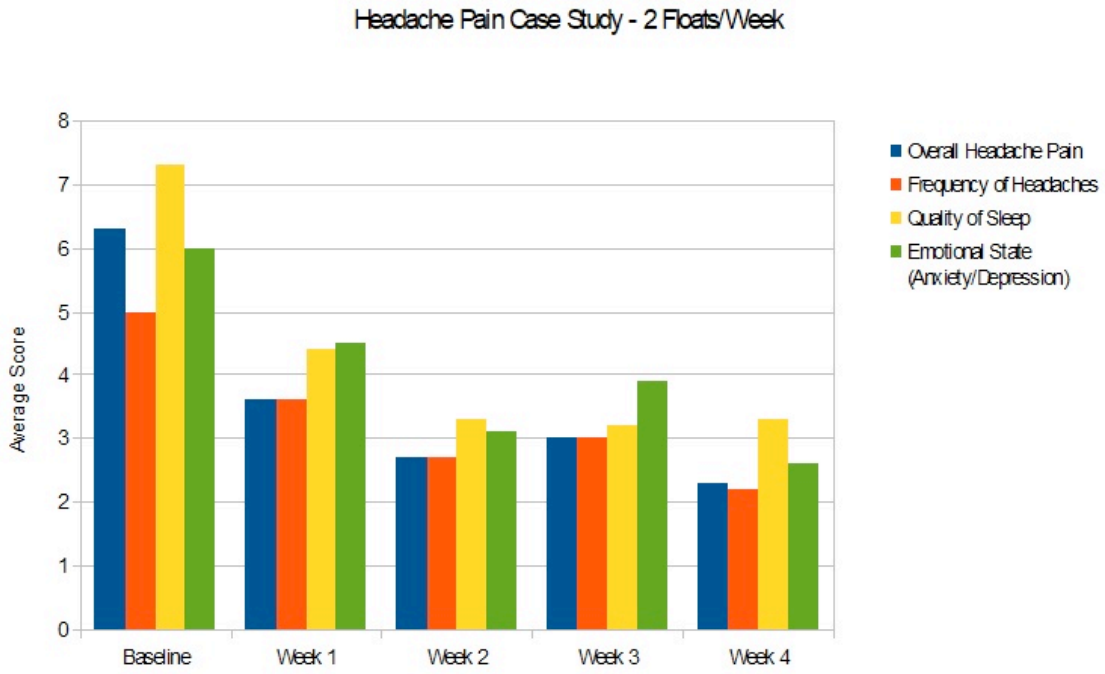
[1] The four week time frame was chosen to reflect a common period of most therapeutic approaches, such as chiropractic or physical therapy to establish if a protocol is working.

There was no interaction with the participants during the course of the study. There was no cost for the participants and there was no financial gain from The Float Zone, where the case study took place. There are no other disclosures.

Results

Group A (1 Float per Week)





Group B (2 Floats per Week)

Headache Pain Intensity (see graph)

Evaluating the intervention of floating on headache intensity levels, both groups made improvements., **Group A (1 float/week) improved 63.33% representing a drop from a baseline average of 5 to 1.8/10.**
Group B (2 floats/week) improved 63.08%, representing a drop from a baseline average of 6.5 to a week 4 average of 2.3/10.
Comparing Group A to Group B, there is negligible difference representing less than .5% **lesser improvement for Group B over Group A. The 1x/week group improved just as much as the 2x/week group.**

Frequency of Headaches (see graph)

Evaluating the intervention of floating on the frequency of chronic headaches, **Group A improved 34.92%, representing a drop from a baseline average of 3.5 to a week 4 average of 2.3/10**
Group B improved 56.92%, representing a reduction from a baseline average of 5 to a week 4 average of 2.2 /10
This is reflective of a 22% difference between the groups which translates to a **63% improvement of Group B vs Group A**.

Quality of Sleep (see graph)

Evaluating the intervention of floating on quality of sleep, **Group A improved 56.30%, representing a drop from a baseline average of 7.5 to a week 4 average of 3.3/10**
Group B improved 54.38% representing a drop from a baseline average of 7.25 to a week 4 average of 3.3/10.
This is reflective of a 3.41% difference between the groups which translates to a **3.41% improvement of Group A vs. Group B.**

Emotional State including Anxiety and Depression Level (see graph)

Evaluating the intervention of floating on emotional state, **Group A improved 45.45%, representing a drop from a baseline average of 5.5 to a week 4 average of 3.0/10**
Group B improved 56.41% representing a drop from a baseline average of 6 to a week 4 average of 2.6/10.
This is reflective of a 10.96% difference between the groups which translates to a **24.10% improvement of Group B vs. Group A.**

Headache affect on Vision (*graph available upon request)*

Evaluating the intervention of floating on how chronic headaches affect vision, **Group A improved 54.17%, representing a drop from a baseline average of 4.0 to a week 4 average of 1.8/10**

Group B improved 71.54% representing a drop from a baseline average of 5 to a week 4 average of 1.4/10. This is reflective of a 17.37% difference between the groups which translates to a **32.07% improvement of Group B vs. Group A.**

Affect on hearing *(graph available upon request)*
Evaluating the intervention of floating affecting hearing issues as a side effect of chronic headaches, **Group A improved 75.31%, representing a drop from a baseline average of 4.5 to a 4 week average of 1.1/10**

Group B improved 71.54% representing a drop from a baseline average of 5.5 to a week 4 average of 1.7/10. This is reflective of a 6.08% difference between the groups which translates to a **8.07% improvement of Group A vs. Group B.**

Affect on daily activities (*graph available upon request)*
Evaluating the intervention of floating on activities of daily living, **Group A improved 61.90%, representing a drop from a baseline average of 3.5 to a 4 week average of 1.3/10.**

Group B improved 61.54% representing a drop from a baseline average of 4.5 to a week week average of 1.7/10. This is reflective of a .36% difference between the groups which translates to a **0.59% improvement of Group A vs. Group B.**

Affect on productivity and focus *(graph available upon request)*
Evaluating the intervention of floating on productivity and focus, **Group A improved 65.28%, representing a drop from a baseline average of 4.0 to a week 4 average of 1.4/10.**

Group B improved 72.44% representing a drop from a baseline average of 6 to a week 4 average of 1.7/10. This is reflective of a 7.16% difference between the groups which translates to a **10.97% improvement of Group B vs. Group A.**

Conclusion

Floatation therapy, or floating, has a direct and positive effect on reducing both the intensity and frequency of chronic headaches, as well as improving sleep quality, emotional state and other associated symptoms including vision and hearing. There were no negative effects.

Float frequency (2 floats/week vs. 1 float/week) does makes a difference in the frequency of headache episodes, as well as with improving emotional state. However, for other areas, including headache intensity, sleep, focus/productivity and activities of daily living, it was

more the intervention itself, rather than the frequency of floating, that made the difference. Therefore, in this case, the intervention of floating regularly for 4 weeks is effective regardless of the frequency of floating.

Patients, medical professionals and alternative health care providers should consider floatation therapy by itself and in tandem with other mind/body approaches to manage chronic headaches.

Discussion

In all the individual participants and both groups collectively, there was remarkable positive improvement in all categories and there were no negative effects. In each category, there was a **minimum improvement of 34%** (seen with frequency of headaches in Group A). **Every other category for both groups realized between 50% and 70% improvement.** Thus, regardless of group comparison, the overall effect was both positive and significant. This is even in light of this study taking place during the month of February, the height of cold and flu season and the beginning of pollen season.

In every category, the average baseline value was higher to start in group B, the twice weekly group, including intensity, frequency, affect on activities, focus/productivity, emotional state and side effects of vision and hearing. The one exception is that the baseline value for quality of sleep in both groups was almost identical at 7.5/10. This was also the highest baseline value among all the categories - indicating that both groups had very significant issues with sleep.

The quality of sleep value for both groups coincidentally dropped to a 3.3/10 at the end of the study, which is the largest positive gain across both groups. The significance of improvement in the sleep category should be seen as influencing the improvement in other categories, since sleep helps everything from pain to emotional state. As other research is showing, sleep is so crucial for brain health and for overall health and wellness. The positive outcome for sleep measures is consistent with other case studies that have been performed for chronic neck pain, chronic low back pain and traumatic brain injury.

Here are a few comments (during the case study) from the participants:

“I have noticed I seem to be sleeping better. I have always had sleep issues. I have noticed since I started floating it has been easier for me to fall asleep.”

“Really noticing my sleep improving. I wake up feeling much more rested and it has been easier to fall asleep at night.”

“I noticed I felt much more rested this morning and my overall mood and energy level has been much better today since floating last night.”

“I am adhd and have been off my medication since November. I noticed my concentration has greatly improved and my ability to stay on task at work as well as being able to meditate regularly.”

"When I walked in to my float session today, I had a significant headache. When I walked out it was gone completely.”

“Floating is helping to relieve stress and anxiety”

“My anxiety is fading”
“Things are getting much better and I’m seeing a difference. Pain levels are less and ability to relax is much better.”

“I floated yesterday and had the best nights sleep that I’ve had in a long time. I went to bed at midnight and slept till 1:30 pm. I rarely get more than 3-4 hours of sleep a night.”

“Floating has changed a lot in my life. I still have ups and downs, family fighting, disability, caring for loved ones, but it helps calm me down and get away from it all.”

“Things have done a 180 in my life emotionally and health -wise. I feel better. Not 100% but much better than before I started.”

“Floating has helped my stress levels tremendously.”

“Floating has helped me significantly. Migraines have been far and few and the edge on life has been softer.”

“Today was the first day in awhile that I did not have a headache.”

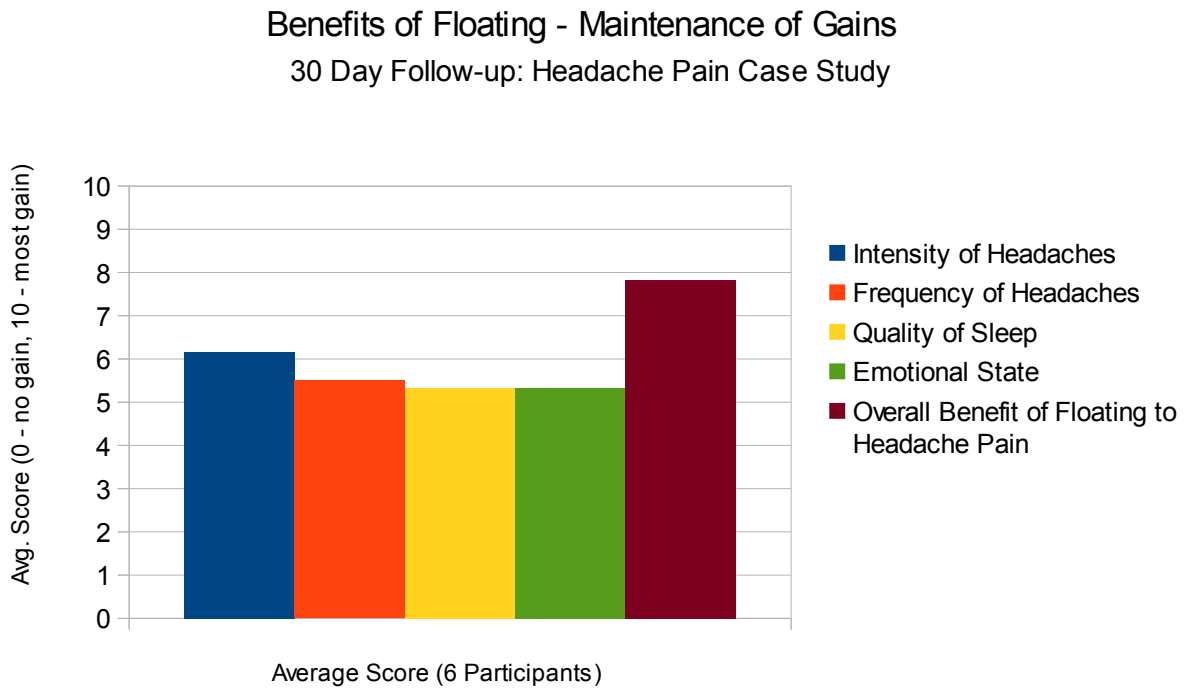
“No headache today!” (*written 8 different times in 30 day period*)

“I felt very relaxed after the float and was in a much calmer state when I was at home.”

“Body aches seem to be reduced a lot for several hours after the float”

“My joints do not hurt as bad today, even with rain today”

A 30 day follow- up survey was sent to the participants to gauge their maintenance of results. In viewing the results, through the following graph it is apparent that the participants collectively noted that they maintained significant benefits.



30 Day Follow-up Comments

“My concentration has greatly improved. I started reading novels again after floating as my way to relax. I have been through several books. I have maintained a good sleep schedule and my anxiety has still been greatly decreased.”

“I feel as though floating is a central treatment for anyone with chronic pain. It's almost a must in treatment.”

“I think this headache study was great. I hope other participants had great results like I did!”