

Reversing Alzheimer's: Efficacy of Non - Invasive Quantum Therapies on Human Physiology

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The prototype device used in the case study was invented by the research student, who is also the principal researcher of the case study. Provisional patent status was granted by the United States Patent & Trademark Office.

The volunteer respondent gave informed consent in accordance with the 45 CFR 46 and 21 CFR 50 of the Code of Federal Regulations in the U. S.

Abstract: *Results of and conclusions drawn from the following case study challenge existing assumptions concerning the irreversibility of Alzheimer's disease. This case study documents the application of 40 Hz sound frequencies alongside lower and higher aptitude frequencies, along with vibrational entrainment techniques, and photobiomodulation (PBM), which may enhance human cognition, reverse Alzheimer's, and offer additional physiological benefits. These unique interventions were applied to a 73 - year - old African American female volunteer diagnosed with moderate Alzheimer's in 2023. The respondent participated in a five - day, non - invasive intervention, which was to serve as a pre - requisite before enrollment in an experimental drug trial (Note: the original intervention was slated for five full days, the results noted in this case study are from four days of therapeutic intervention). The four - day intervention involved frequency modulations, PBM, gamma light frequency, and vibrational therapy. Significant outcomes included medically documented reductions in the respondent's blood pressure, improvements in short - term memory recall and cognitive function, and self - reported sustained improvements according to all these indicators. The findings of this case study suggest significant connections between novel, frequency - oriented therapies that are non - invasive and non - pharmacological, and positive physiological outcomes. The results also indicate the need for more rigorous research in this area, to validate these case study findings in the context of controlled clinical trials examining statistically significant sample sizes.*

Keywords: Alzheimer's Disease, Non - Invasive Therapy, Quantum Physical Pathology, Photobiomodulation, Cognitive Improvement

1. Background

Alzheimer's disease is a cognitive disorder and a form of dementia, and one of the leading causes of death for Americans 65 and over.¹ Currently, there is no known medical cure for Alzheimer's. A plethora of research, exploration, and resources are dedicated to finding a cure for Alzheimer's, with some promising, but comparatively small - scale results.² Massachusetts Institute of Technology (MIT) is arguably leading the nation in providing effective treatments and/or a potential cure. MIT research indicates that phosphorylated tau (P - TAU), the blood biomarker commonly found in Alzheimer's patients, can be decreased in lab mice who were given the disease, by using specific sound frequencies and photobiomodulation (PBM) therapies, with the possibility of duplicatable results. Hence, MIT is the first therapeutic intervention for Alzheimer's to demonstrate that P - TAU is reversible in lab mouse models.^{3, 4} Research suggests that PBM may have revolutionary implications for changing the way practitioners conceptualize Alzheimer's and its associated prognoses.^{5, 6, 7} Inspired by such existing research, this case study documents a groundbreaking discovery with promising results, which involved the use of PBM, and vibroacoustic modalities. Based on the verified medical data, Respondent 0071 of the case study was diagnosed with Alzheimer's, 73 years of age, African American female, and living with high blood

pressure and hyperglycemia (high sugar). After the respondent received the Alzheimer's diagnosis, she was asked to participate in a clinical trial that would have administered ATH - 1017, an experimental drug designed to combat dementia. However, the Respondent volunteered for the case study four days before being prepped for the experimental medication and saw such positive cognitive results within the 4 days, that she was informed there would be no need to undergo the experimental ATH - 1017 medication by medical staff. This article provides an overview of the case study's methods, a case study summary, observation notes, results, a discussion of results, and a conclusion.

2. Methods

The case study employed a mixed methods methodology to explore and evaluate the potential reversal of Alzheimer's disease and associated symptoms, through a combination of non - invasive, non - pharmacological interventions involving quantum energetic elements such as sound frequency, and photonic modalities and documenting the impact on neuronal structures and processes concerning cognitive clarity and human physiology. The primary and only respondent of the case study was Respondent 0071, a 73 - year - old African American female diagnosed with mild to moderate Alzheimer's disease.

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Before the respondent participated in interventions, the researcher analyzed other case studies, research, and data from several countries, including the United States, Canada, China, France, Germany, United Kingdom, and select African nations, searching for historical, modern, and causal connections between sound, light, and vibration, and how cellular structures in human physiology are impacted. This analysis was conducted as a review of the literature within which the researcher could contextualize the findings of this case study. Additionally, a synthesis of the existing literature and empirical evidence reviewed suggested promising implications for the modalities implemented by the researcher, and supported the need for future research in the domain of non-invasive therapies for Alzheimer's patients including PBM.5^{6,7} Inspired and supported by existing empirical literature, the researcher developed a hypothesis that correlated frequencies, in particular, 40 Hz in concert with other frequency modalities, and vibration also known as vibroacoustic technologies, may significantly alter or reverse adverse brain pathology.

The Respondent engaged in 4 days of therapy. Each day consisted of the following;

- a) 4 days of 1 hour of 40 Hz sound frequency tactile and sine wave frequency during daytime session.
- b) 3 days of 30 - minute cranium vibrational therapy during daytime sessions, which coincided with the 1 hour of 40 Hz sound frequency delivery.
- c) 1 day of light therapy using 40 Hz gamma light frequency through the eye orbitals during one daytime session.
- d) 4 nights (roughly 6 – 8 hours a night) of the following frequencies for sleep assistance and enhanced effect; 7.83 Hz, 4 Hz, 40 Hz (short tone), 5.83 Hz, 7.1 Hz, 2.98 Hz, 528 Hz (short tone), 639 Hz (short tone), 1.74 Hz, 2.85 Hz, 3.96 Hz, 4.17 Hz, 5.28 Hz, 6.29 Hz, 7.41 Hz, 8.52 Hz, 9.63 Hz, 23 Hz, 103 Hz and 70 Hz. All frequencies under 24 Hz were achieved through binaural frequency methodology, with the higher frequencies taking advantage of the brain's Frequency Following Response (FFR) modality via pure sine waves.
- e) Respondent was also encouraged to engage in earthing at least once a day.

The device used to deliver the variations of sound frequency, vibrational, and photonic therapies was the prototype of the Neurological Brain Entrainment Device (NBED), invented by Ali - Rashad Richey, who has been granted provisional patent status for the medical device from the US Patent & Trade Office.

3. Case Study Summary

The research volunteer, Respondent 0071, an African American female age 73, was experiencing cognitive decline, moderate to severe memory loss, and occasional dizziness, all signs of possible Alzheimer's. These symptoms were documented for roughly 18 months consistently, according to medical records. The Respondent noted that symptoms became expressly severe, prompting the Respondent to involve her family and seek specialized medical care. After cognitive tests and examinations, the Respondent was diagnosed with mild

to moderate Alzheimer's disease. Given the respondent's age and diagnosis, she was asked to take part in a dementia study that administered the experimental medication, ATH - 1017. ATH - 1017 "is an investigational drug designed to support the growth and survival of nerve cells. This study, called LIFT - AD, will determine the safety and effectiveness of ATH - 1017 to improve cognition in people with mild to moderate Alzheimer's disease."⁸

The Respondent agreed to participate in the experimental medication research study. However, during the five days needed for the medical facility to book and officially qualify Respondent for the 6 - month ATH - 1017 clinical trial, the Respondent volunteered for the case study led by the researcher. For four days, the Respondent utilized the prototype version of a neural - modulation head device, with an added sleep setting protocol, and appeared to experience immediate positive results in cognitive clarity and short - term memory recall. Notes taken concerning the Respondent's experience, which were submitted in real - time by the Respondent, indicated daily significant improvements in cognition and energy. After four days of in - person sessions and a self - administered nightly routine, the Respondent visited the specialist care medical doctor on July 21st, 2023, to undergo a spinal tap procedure and other medically required protocols required to participate in the experimental ATH - 1017 clinical trial study.

As documented by medical personnel the Respondent's blood pressure five days before participating in the case study intervention was 144 over 125. However, five days later, following participation in the researcher's interventions, the Respondent's blood pressure read 109 over 77. The Respondent indicated she experienced high blood pressure for 11 years and takes medication for the disease. According to the Respondent, this was the first sharp decline in her blood pressure readings she had experienced since being diagnosed with high blood pressure. Regarding her blood pressure, the Respondent stated, "Never has it been that low." The Respondent was also given the standard short - term memory recall exam by medical staff. According to the Respondent's family, earlier that week (five days prior), she was unable to recall (remember) nor repeat three words back to the medical professional, but her Friday exam, five days later, which took place following the researcher's intervention, rendered a memory recall score of 29 out of 30 correct. This score is verified by the Respondent's medical records. The medical record documents that the Respondent was eventually advised that there would be no experimental drug study recommended for her due to her significant improvement and lack of need for the drug trial intervention. In August 2023, even though Respondent displayed no noticeable symptoms of Alzheimer's disease and was living a productive life that included driving, volunteering daily, and exercising, the medical facility requested that she schedule a visit to test for the P - TAU biomarker commonly found in Alzheimer's patients. The results of the Respondent's follow - up exam are discussed in the following section.

4. Results

The Respondent was interviewed for follow - up on 11/10/23. She stated that she experienced no signs of dementia at that time. The Respondent showed enhanced cognitive functions and provided thorough details as to her increased mental acumen. The Respondent's blood sugar A1C was recorded as 8.6 in early 2023, and after the intervention, was recorded at 6.4. During her post - intervention follow - up examination, she indicated she stopped taking most of her medications and felt overall "much healthier." Although the Respondent appeared to no longer have any noticeable symptoms of Alzheimer's disease in August 2023, and was living a productive life at that time, which included driving, volunteering daily, and exercising, the Respondent's primary care medical facility requested that she schedule a visit to test for the P - TAU biomarker commonly found in Alzheimer's patients. Blood lab results in September of 2023 showed the P - TAU level A quantitative number could not be found, resulting in a result of less than 1%, which indicated that the Respondent will likely never develop dementia in the future. The Respondent also indicated, during her last evaluation, that her cognitive gains remained constant, she continued to use the prototype device at night and attributed her mental clarity and enhanced cognition to the case study interventions she took part in and the associated interventions she continued to implement. While there is no known cure for Alzheimer's disease, the results of the case study warrant further medical investigation.

5. Discussion

A case study conducted in July of 2023 led by the researcher, appears to have challenged the medically held notion in neuroscience and biological sciences that Alzheimer's disease (the most common form of dementia), cannot be reversed. Based on the case study, which included pre - and post - intervention medical documentation, Alzheimer's may be reversible in humans through a specific combination of frequency modulations, photobiomodulation (PBM), and targeted frequency oscillations. Paris Graduate School's (PGS) research parallels the discoveries MIT researchers have made using lab mice with dementia and exposing them to 40 Hz frequencies.⁹⁻¹⁰ Evidence that noninvasive sensory stimulation using 40 Hz gamma frequency rhythms matching brain waves can reduce Alzheimer's pathology and associated symptoms in mice and humans has already been demonstrated by multiple researchers.⁹⁻¹⁰ Now, such research extends to tactile stimulation. A recent study indicates that Alzheimer's mice study subjects that were exposed to 40 Hz vibration for one hour each day, for weeks, revealed both improved brain and motor function compared to untreated controls.⁹ This study was not the first to demonstrate that gamma - frequency tactile stimulation is found to significantly improve motor function and brain activity.^{11, 12, 13} Additional existing research demonstrates the powerful impact of gamma frequency on brain activity and motor function.^{11, 12, 13} However, doctoral researcher Ali - Rashad Richey is the first researcher to show that Alzheimer's disease can potentially be completely reversed inside of human physiology, and done so without an invasive procedure or chemical - based medication.

6. Conclusion

The findings of the case study suggest that non - invasive, non - pharmacological therapies such as PBM, sound frequencies, and vibroacoustic methodologies, may not only result in significant reductions of Alzheimer's severity and symptoms in elderly patients but also, may hold the potential to completely reverse the disease. The case study's findings align with and support the preliminary findings of prior research involving similar vibrational therapies and modalities on lab mice subjects. However, this case study is the first to demonstrate such significant elimination of Alzheimer's symptoms and physiological responses to treatment, in a human subject. The findings of this case study imply the need for more rigorous, future research validating the findings in the context of larger, statistically significant, clinical trials.

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Certified Case Study
Medical Agency: WCMC
Respondent#: 0071
Principal Investigator: Richey
11/22/23



West Cascade Medical Center employs neurologists, chiropractors, and medical health specialists to provide cutting-edge brain care, spinal care, and regenerative health.

Alzheimer's disease, a form of dementia, is one of the leading causes of death for Americans 65 and over. Currently, there is no known medical cure. A plethora of research, exploration, and resources has been dedicated to finding a cure for the cognitive disorder, with some promising, but comparatively small-scale results. MIT is arguably leading the nation with finding effective treatments and/or a potential cure, already proving that phosphorylated tau (P-TAU), the blood biomarker commonly found in Alzheimer's patients, can be decreased in lab mice who were given the disease, by using specific sound frequencies and photobiomodulation (PBM), with the possibility of duplicatable results. This makes MIT the first to demonstrate that P-TAU is reversible in lab mouse models.

Another potentially groundbreaking discovery is being led by Paris Graduate School (PGS) in Paris, France, where American researcher and quantum physics doctoral research student Dr. Rashad Richey, who is also a Visiting Scholar at Clark Atlanta University, conducted a case study utilizing photobiomodulation (PBM), vibroacoustic modalities, and specific sound frequencies that yielded promising results. Based on the verified medical data, Respondent 0071 of the case study was diagnosed with Alzheimer's, 73 years of age, and living with high blood pressure and hyperglycemia (high sugar). After the Respondent received the Alzheimer's diagnosis, she was asked to participate in a clinical trial that would have administered ATH-1017, an experimental drug designed to combat dementia. However, the Respondent volunteered for Richey's case study 5 days prior to being prepped for the experimental medication and saw such positive cognitive results within the 5-day period, that she was informed there would be no need to undergo the experimental ATH-1017 medication by medical staff.

Case Study Summary: A case study conducted in July of 2023 led by Dr. Rashad Richey, a PGS doctoral research student in the quantum physics research program, appears to have challenged the medically held notion in neuroscience and biological sciences that Alzheimer's disease (the most common form of dementia), cannot be reversed. Based on the case study, which included before and after medical documentation, Alzheimer's may be able to be reversed in humans through a specific combination of frequency modulations, photobiomodulation-PBM (gamma light frequency), and vibrational patterns. As part of Richey's research program, he analyzed other case studies, research, and data from several countries, including the United States, Canada, China, France, Germany, United Kingdom, and select African nations, searching for historical, modern, and causal connections between sound, light, and vibration, and how cellular structures in human physiology are impacted. From this, Richey developed a hypothesis

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Certified Case Study ⁽²⁾

Medical Agency: *WCMC*

Respondent#: *0071*

Principal Investigator: *R. L. Loy*



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that correlated frequencies, in particular, 40 Hz in concert with other frequency modalities, and vibration also known as vibroacoustics, to brain pathology. While there is no known cure for Alzheimer's disease, the results of the case study warrant further medical investigation. The research volunteer ('Respondent 0071'), an African American female age 73, was experiencing cognitive decline, moderate to severe memory loss, and occasional dizziness, all signs of possible Alzheimer's. This lasted for roughly 18 months consistently, according to medical records. The Respondent noted that symptoms became expressly severe, prompting the Respondent to involve her family and seek specialized medical care. After cognitive tests and examinations, Respondent was diagnosed with mild to moderate Alzheimer's disease. Given the respondent's age and diagnosis, she was asked to take part in a dementia study that administered the experimental medication, ATH-1017. According to Alzheimers.gov, ATH-1017 "is an investigational drug designed to support the growth and survival of nerve cells. This study, called LIFT-AD, will determine the safety and effectiveness of ATH-1017 to improve cognition in people with mild to moderate Alzheimer's disease." Respondent agreed to participate in the experimental medication research study, but during the 5 days needed for the medical facility to book and officially qualify Respondent for the 6-month ATH-1017 clinical trial, she volunteered for the case study led by the researcher from P GS. For 5 days, Respondent wore the prototype version of a neural-modulation head device properly known as the Neurological Brain Entrainment Device for 1.5 - 3 hours daily, with an added sleep time protocol, and appeared to experience immediate positive results in cognitive clarity and short-term memory recall. Case study notes, which were submitted in real-time by the Respondent, indicate daily significant improvements in cognition and energy. After 5 days of in-person sessions and a self-administered nightly routine, Respondent went back to the medical doctor on July 21st, 2023, to undergo a spinal tap procedure and other medically required protocols to participate in the experimental ATH-1017 clinical trial study.

Upon taking the Respondent's blood pressure, it was noted by medical personnel that her blood pressure 5 days prior was 144 over 125 but the reading 5 days later showed 109 over 77. The Respondent indicated she has experienced high blood pressure for 11 years and takes medication for the disease. According to the Respondent, this was the first sharp decline in her blood pressure readings she has experienced, and stated, "Never has it been that low". The Respondent was also given the standard short-term memory recall exam by medical staff. According to the Respondent, earlier that week (five days prior), she was unable to recall (remember) and/or repeat 3 words back to the medical professional, but her Friday (five days later) exam rendered a memory recall score of 29 out of 30 correct, which is verified by Respondent's medical records.

The medical record notes that the Respondent was eventually told to go home and there would be no experimental drug study recommended.

Additional Observation Notes: Respondent was interviewed for follow-up on 11/10/23. She stated there are still no signs of dementia. Respondent showed enhanced cognitive functions and provided thorough details as to her increased mental acumen. Respondent's blood sugar A1C

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Certified Case Study (3)

Medical Agency: WCMC
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Principal Investigator: Richey



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was 8.6 earlier in the year and is now 6.4. She indicated she has stopped taking most of her medications and feels overall "much healthier". In August 2023, even though Respondent appeared to no longer have any noticeable symptoms of Alzheimer's disease and living a productive life; driving, volunteering daily, exercising, etc., the medical facility requested that she come back in to test for the P-TAU biomarker commonly found in Alzheimer's patients. Blood lab results came back in September of 2023 showing the P-TAU level A quantitative number could not be found, resulting in a result of less than 1%, indicating the Respondent will likely never develop dementia in the future. The Respondent indicates her cognitive gains have remained constant, she continues to use the prototype device at night and attributes her mental awareness and enhanced cognition to the case study led by Richey.

Research Parallels: PGS's research parallels the discoveries MIT researchers have made using lab mice with dementia and exposing them to 40 Hz frequencies. Evidence that noninvasive sensory stimulation of 40 Hz gamma frequency brain rhythms can reduce Alzheimer's disease pathology and symptoms, already shown with light and sound by multiple research groups in mice and humans, now extends to tactile stimulation. A new study by MIT scientists shows that Alzheimer's model mice exposed to 40 Hz vibration for an hour a day for several weeks showed improved brain health and motor function compared to untreated controls. Neither the MIT group nor the PGS researcher are the first to demonstrate that gamma frequency tactile stimulation can affect brain activity and improve motor function, but Richey is the first researcher to show Alzheimer's disease can potentially be completely reserved inside of human physiology and done so without an invasive procedure or chemical-based medication. It is noted that researchers affiliated with PGS and other universities have acknowledged Richey as the first person to produce a "complete turnaround" case study with medical documentation, indicating there is potentially a cure for Alzheimer's, the fifth-leading cause of death among Americans 65 and over.

Conclusion: West Cascade Medical Center finds these results intriguing and deserving of further medical exploration. The medical center in 2024 will conduct additional case studies and move towards double-blind clinical trials to prove duplicable outcomes, testing the effects of The Neurological Brain Entrainment Device on willing participants living with dementia. Richey will be the Principal Investigator with clinical trial oversight led by a medically designated neurosurgeon or neurologist. Richey was awarded provisional patent status by the United States Patent & Trademark Office for inventing the Neurological Brain Entrainment Device.

****Based on information from the Picower Institute, MIT is the first to show that the stimulation can also reduce levels of the hallmark Alzheimer's protein phosphorylated tau in model mice, keeping neurons from dying or losing their synapse circuit connections, and reducing neural DNA damage. "This work demonstrates a third sensory modality that we can use to increase gamma power in the brain," says Li-Huei Tsai, corresponding author of the*

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Certified Case Study

Medical Agency: *WCMC*

Respondent#: *0071*

Principal Investigator: *Rickay*



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MIT study, director of The Picower Institute for Learning and Memory and the Aging Brain Initiative at MIT, and Picower Professor in the Department of Brain and Cognitive Sciences (BCS). "We are very excited to see that 40 Hz tactile stimulation benefits motor abilities, which has not been shown with the other modalities. It would be interesting to see if tactile stimulation can benefit human subjects with impairment in motor function."

Dr. Winston Carhee

A handwritten signature in black ink, appearing to read 'W. Carhee', written over a horizontal line.

Administrator, WCMC

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