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Energetic homeostasis achieved through biophoton energy and accompanying medication treatment resulted in sustained levels of Thyroiditis-Hashimoto's, Iron, Vitamin D & Vitamin B12.

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SUMMARY/ABSTRACT
We present the case of a 37-year-old premenopausal woman, who presented with fatigue, weakness, pallor, and myalgias. She was on treatment for Hashimoto's Thyroiditis, iron deficiency anemia, deficiency of vitamin D and B12. Further diagnostic workup revealed her anemia was attributed to a long history of menorrhagia, deficiency of vitamin D and B12 which was attributed to Celiac disease. Her overall health improved with daily medication and by being around the biophoton generators, a device-generated biophoton field. Supplemental exposure to biophoton energy stabilized her blood component levels and improved the functional and energetic conditions of all her organs and systems.

Keywords: biophotons; biophoton energy; biophoton generator; biophoton therapy; life force energy; energetic conditions

1. BACKGROUND

Hashimoto's thyroiditis is an autoimmune illness in which the thyroid gland is attacked by cell and antibody mediated responses. It is often associated with arthralgia, and myalgia, and can lead to myopathy.[1] Anemia is a condition characterized by a shortage of red blood cells or hemoglobin, which leads to reduced oxygen-carrying capacity in the blood. The most common cause of anemia is iron deficiency, but it can also be caused by other factors such as vitamin deficiencies, chronic diseases, and genetic disorders.[2] Vitamin D is a fat-soluble vitamin, and it is essential to the immune system's defense against many pathogens. It protects against osteoporosis and is also crucial to muscular movements and neurological signal transmission.[3] Vitamin B12 is a water-soluble vitamin. It is important in the synthesis of Deoxyribonucleic Acid (DNA) and thus cell division, cellular metabolism, and maintenance of the integrity of the nervous system.[2] The woman had all above disorders, and she was treated with medicine alone. She needed to improve the energy of all her organs with biophotons.

2. CASE PRESENTATION

A 37-year-old premenopausal woman presented to the clinic with fatigue, weakness, pallor, and myalgias. She reported a history of Hashimoto's thyroiditis, iron deficiency anemia, vitamin D deficiency, and vitamin B12 deficiency. Her anemia was attributed to a long history of menorrhagia, and she was being treated with iron supplementation. Her vitamin D and B12 deficiencies were attributed to celiac disease, and she was being treated with daily supplements. Despite treatment, she continued to experience fatigue and weakness.

On physical examination, the patient appeared pale and fatigued. She had diffuse myalgias but no significant joint swelling or tenderness. Laboratory tests revealed a hemoglobin

level of 8.1 g/dL, which was consistent with her previously diagnosed anemia. Her vitamin D level was low at 14.2 ng/mL, and her vitamin B12 level was 413 pg/mL. Her thyroid-stimulating hormone level was within normal limits (Table 1).

The patient was started on an increased dose of iron supplementation orally and by infusion, and advised to continue her daily vitamin D and B12 supplements. However, despite these interventions, her symptoms persisted.

3. DIAGNOSTIC WORKUP

Given the persistence of the patient's symptoms, further diagnostic workup was initiated. The patient underwent an upper endoscopy with small bowel biopsy, which revealed findings consistent with celiac disease. She was advised to follow a strict gluten-free diet and referred to a registered dietitian for further counseling.

The patient's laboratory test revealed an increased level of factor VIII activity, which was above the normal range, while the von Willebrand factor antigen assay and activity were normal. These results were not in line with the diagnosis of von Willebrand disease based on the current National Heart, Lung, and Blood Institute guideline.

In addition, the patient was introduced to biophoton therapy using a biophoton generator. The biophoton generator was a non-biological device that emits a biophoton field that is believed to stabilize the energy levels of cells and tissues. The patient was advised to spend at least 8 hours per day in the biophoton field generated by the device.

4. TREATMENT AND OUTCOME

The patient adhered to a gluten-free diet and continued her medications and iron supplementation. She also spent at least 8 hours per day in the biophoton field generated by the device.

After several weeks of treatment, the patient reported significant improvement in her symptoms of fatigue and weakness. She also reported a reduction in her myalgias. Repeat laboratory tests revealed an improvement in her hemoglobin level to 9.4 g/dL, an increase of her vitamin D level to 20.6 ng/mL, and a change in her vitamin B12 level to 361 pg/mL. Her thyroid-stimulating hormone level remained within normal limits.

Her follow up Bio-Well scan showed improvements in functional and energetic condition of organs and systems, correction and increased energy levels from very low to low and normal energy levels in several systems and organs as compared to an initial scan (Table 2). The scan also showed an energy and balance increase of 20% and is considered a treatment success.

To the best of our knowledge, this is the first reported case of Hashimoto's Thyroiditis involving stabilization of thyroid, iron, vitamin D and B12 levels, and improvements in the functional and energetic conditions of all the organs and systems just by supplementing and following the daily use of biophoton energy in addition to her medication treatment.

Table 1. Lab Test and Results.

	9/14/22	8/24/22	7/18/22	7/1/22	6/16/22	5/17/22	4/19/22	3/14/22	1/05/22	Normal Range
RBC	3.39 x10E3/uL	3.33 x10E3/uL	3.49 x10E3/uL	3.59 x10E3/uL	3.08 x10E3/uL	3.58 x10E3/uL	3.43 x10E3/uL	3.26 x10E3/uL	3.02 x10E3/uL	3.77-5.28 x10E3/uL
HGB	9.4 g/dL	8.2 g/dL	9.3 g/dL	9.2 g/dL	6.9 g/dL	9.6 g/dL	9.3 g/dL	8.9 g/dL	8.1 g/dL	11.1-15.9 g/dL
Hematocrit	29.4%	27.6%	30.0%	30.8%	24.3%	29.6%	28.7%	28.2%	26.9%	34-46.6%
Iron	49 ug/dL	17 ug/dL	42.0 ug/dL	50 ug/dL	16 ug/dL	27 ug/dL	30 ug/dL	39 ug/dL	34 ug/dL	27 – 159 ug/dL
Iron, % saturation	17.0 %	5.0 %	20.0	24.0 %	5.0 %	8.0 %	10.0 %	17.0 %	13.0 %	15.- 55 %
Ferritin	582 ng/mL	33 ng/mL	220 ng/mL	637 ng/mL	25 ng/mL	123 ng/mL	372 ng/mL	491 ng/mL	293 ng/mL	15.0 – 150 ng/mL
TIBC	287 ug/dL	353 ug/dL	211 ug/dL	212 ug/dL	348.0 ug/dL	335 ug/dL	286 ug/dL	235 ug/dL	258 ug/dL	250 - 450 ug/dL
Unbound iron capacity	238 ug/dL	336 ug/dL	169 ug/dL	162 ug/dL	332 ug/dL	308 ug/dL	256 ug/dL	196 ug/dL	224 ug/dL	131- 425 ug/dL
Vitamin D, 25-hydroxy	20.6 ng/mL				19.1 ng/mL			14.2 ng/mL		30 - 100 ng/mL
Vitamin B12	361 pg/mL	377 pg/mL	449 pg/mL		395 pg/mL	403 pg/mL	391 pg/mL	356 pg/mL	413 pg/mL	232- 1245 pg/mL
TSH, mIU/L							3.05 uIU/mL			0.45 - 4.5 uIU/mL
T4, free							1.02 ng/dL			0.82 - 1.77 ng/dL

Table 2. Functional and energetic condition of organs and systems from May 27, 2022, and September 22, 2022.

Organ	**Energy Levels @ Baseline 05/27/22** Energy, joules ($x10^{-2}$)	**Energy Levels after use 09/22/22** Energy, joules ($x10^{-2}$)	**Energy Balance Baseline 5/27/22** (%)	**Energy Balance After use 9/22/22** (%)
1. Head	3.37	4.34	78.50	77.97
Eyes	2.94	4.26	76.33	81.34
Ears, Nose, Maxillary Sinus	2.44	3.49	67.70	74.86
Jaw, Teeth	2.81	4.23	49.55	75.00
Cerebral zone (cortex)	5.28	5.37	99.92	79.64
2. Cardiovascular System	3.47	4.69	97.83	99.15
Heart	3.16	4.38	68.76	99.59
Cerebral zone (vessels)	6.00	5.72	83.88	95.77
Coronary vessels	5.61	6.28	98.79	95.52
3. Respiratory system	4.21	6.00	70.81	83.37
Throat, larynx, trachea	3.30	6.42	12.20	67.85
Mammary glands	5.63	6.73	93.68	92.36
Thorax zone	3.72	4.84	88.23	91.47
4. Endocrine system	4.02	5.13	95.69	94.38
Hypothalamus	3.93	4.59	87.15	94.36
Epiphysis	5.10	6.26	91.31	91.47
Pituitary Gland	4.07	4.95	98.78	86.45
Thyroid gland	3.46	5.20	52.12	85.04
Pancreas, Spleen	3.55	4.55	87.84	62.65
Adrenals	4.48	5.36	92.58	95.79
Spleen, Pancreas	3.52	4.97	94.04	98.48
5.Musculoskeletal system	4.22	5.55	94.17	96.64
Spine – cervical	3.29	4.52	94.50	94.69
Spine – thorax	3.21	3.72	82.62	93.41
Spine – lumbar	3.02	4.41	99.26	97.88
Sacrum	4.76	6.46	90.62	94.66
Coccyx, Pelvis minor zone	6.81	8.61	82.64	97.72

Digestive system	4.01	5.04	98.77	95.12
Colon - descending	1.92	3.59	100	100
Colon - sigmoid	3.45	5.68	100	100
Rectum	6.29	7.21	100	100
Blind gut	6.11	6.52	100	100
Colon - ascending	3.04	3.77	100	100
Colon - transverse	4.81	5.67	85.59	98.58
Duodenum	3.70	4.14	100	100
Ilium	3.85	4.21	100	100
Jejunum	3.53	4.14	100	100
Liver	4.73	6.62	72.79	91.04
Pancreas, Spleen	3.55	4.55	87.84	62.65
Gallbladder	3.09	4.30	100	100
Appendix	3.45	3.85	100	100
Abdominal zone	3.61	4.41	100	100
6. Urogenital system	4.80	6.70	84.60	93.17
Kidney	4.28	6.09	86.11	91.42
7. Nervous system	3.12	4.07	97.29	93.02
8. Immune system	2.73	4.25	85.28	91.17

5. DISCUSSION

This case highlights the potential benefit of biophoton therapy in the management of a patient with multiple medical conditions, including celiac disease, Hashimoto's thyroiditis, and anemia. While the use of biophoton therapy is not yet supported by a large body of scientific evidence, there is some evidence to suggest that light therapy may have a beneficial effect on anemia by stimulating the production of red blood cells.

Biophotons are produced by all biological bodies such as plants, animals, and humans. Biophoton has been identified as an essential factor for cell growth. In 1927, the Russian embryologist Alexander Gurwitch discovered the emission of light from cells in a living organism. He called them mitogenic rays.[4,5] Then, in 1974, Fritz Albert Popp, a German researcher and Nobel Prize nominee in physics, re-confirmed the existence of these mitogenic rays and renamed them biophotons. He confirmed that all biological systems transmit light and information, and that these subatomic light particles emanate from every living system, including cells and the DNA in our bodies.[6]

The photons are the smallest unit of electromagnetic energy. It is through biophotons that cells communicate with each other and coordinate hundreds of thousands of chemical reactions that occur every second in each cell. Mitochondria have specific properties regarding the absorption of biophotons, which are affecting their function. One of the most important sources of biophoton emission is DNA. These emissions, which are weak compared to the radiation known to us, are nevertheless sufficient to direct the behavior of cells, and biophotons coherence ultimately determines the state of the whole organism. In other words, the disease is acting

beyond the scope of the coherence of the light, light that cells need. For example, people with multiple sclerosis consumed too much light, and people with cancer give too much light.[7,8]

One study published in the Photomedicine and Laser Surgery Journal found that red light therapy increased the production of red blood cells in rats with anemia. The researchers attributed this effect to the stimulation of erythropoietin, a hormone promoting red blood cells. [9] Another study published in the Lasers in Medical Science Journal found that low-level laser therapy improved the symptoms of anemia in patients with chronic kidney disease. The researchers suggested that the therapy may have stimulated the production of red blood cells and improved their function. [10]

Brain activity affects the amount of biophotons emitted by the body. Moreover, biophotons are similar in structure to photons emitted by the sun, but the biophotons of the human body are much less intense.[11,12,13]

While these studies suggest that light therapy may have potential as a treatment for anemia, more research is needed to confirm these findings and determine the optimal parameters for treatment. In the meantime, anemia should be treated with appropriate medical interventions, such as iron supplementation, blood transfusions, or other therapies as recommended by a healthcare provider.

Biophoton therapy using a biophoton generator is believed to stabilize the energy levels of cells and tissues, leading to improved cellular function and overall health. While more research is needed to confirm these findings, the observed efficacy of using biophoton generators by many patients with a variety of unmet medical conditions was higher than 90%.
It is important to note that the patient in this case also adhered to a gluten-free diet and continued her medications and iron supplementation, which may have contributed to improvements.

6. CONCLUSION

The concept of biophotons has been studied for several decades, and while it is still an emerging field, there is growing evidence to suggest that biophotons play a significant role in biological systems. Biophotons are produced by a wide range of living organisms, and they are thought to be involved in various biological processes, including cell communication, DNA replication, and cellular metabolism.

One of the most intriguing aspects of biophotons is their potential use in medical applications. Recent research has shown that biophotons can be used to detect cancer cells in the body, and there is growing interest in the use of biophotons as a tool for cancer treatment. Additionally, biophotons have been shown to be involved in the regulation of the immune system, which could have implications for the treatment of autoimmune diseases.

The potential use of biophotons in medicine is an exciting area of research, but there is still much to be learned about these elusive particles. One of the challenges in studying biophotons is their low intensity, which makes them difficult to detect and study. However, advances in technology are making it possible to measure biophotons more accurately and study their properties in more detail. Overall, the potential use of biophoton therapy in the treatment of disease is an exciting area of research, and it will be interesting to see how this field develops in the coming years.

References:

[1] Mincer DL, Jialal I. Hashimoto Thyroiditis. In: StatPearls. Treasure Island (FL): StatPearls Publishing; June 21, 2022. Reference to a website: https://pubmed.ncbi.nlm.nih.gov/29083758/

[2] Chaparro CM, Suchdev PS. Anemia epidemiology, pathophysiology, and etiology in low- and middle-income countries. Ann N Y Acad Sci. 2019;1450(1):15-31. doi:10.1111/nyas.14092. Reference to a website: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6697587/

[3] Sizar O, Khare S, Goyal A, et al. Vitamin D Deficiency. [Updated 2022 Jul 27]. In: StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing; 2022 Jan-. Reference to a website: https://www.ncbi.nlm.nih.gov/books/NBK532266/

[4] Sanders CL. Speculations about Bystander and Biophotons. Dose Response. 2014;12(4):515-517. Published 2014 May 19. doi:10.2203/dose-response.14-002. Sanders. Reference to a website: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4267444/

[5] Beloussov L. Our standpoint different from common... (Scientific heritage of Alexander Gurwitsch), September 2008, Russian Journal of Developmental Biology 39(5):307-315 DOI:10.1134/S1062360408050081. Reference to a website: https://www.researchgate.net/publication/225680805_Our_standpoint_different_from_common_Scientific_heritage_of_Alexander_Gurwitsch

[6] Popp FA, Nagl W, Li KH, Scholz W, Weingärtner O, Wolf R. Biophoton emission. New evidence for coherence and DNA as source. Cell Biophys. 1984;6(1):33-52. doi:10.1007/BF02788579. Reference to a website: https://pubmed.ncbi.nlm.nih.gov/6204761/

[7] Popp FA, Li KH, Mei WP, Galle M, Neurohr R. Physical aspects of biophotons. Experientia. 1988;44(7):576-585. doi:10.1007/BF01953305. Reference to a website: https://pubmed.ncbi.nlm.nih.gov/3294033/

[8] Volodyaev I, Beloussov LV. Revisiting the mitogenetic effect of ultra-weak photon emission. Front Physiol. 2015;6:241. Published 2015 Sep 7. doi:10.3389/fphys.2015.00241. Reference to a website: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4561347/

[9] Oliveira Sampaio SC, de C Monteiro JS, Cangussú MC, et al. Effect of laser and LED phototherapies on the healing of cutaneous wound on healthy and iron-deficient Wistar rats and their impact on fibroblastic activity during wound healing. Lasers Med Sci. 2013;28(3):799-806. doi:10.1007/s10103-012-1161-9. Reference to a website: https://pubmed.ncbi.nlm.nih.gov/22814898/

[10] Ahrabi B, Bahrami M, Moghadasali R, et al. The Effect of Low-Power Laser Therapy on the TGF/β Signaling Pathway in Chronic Kidney Disease: A Review. J Lasers Med Sci. 2020;11(2):220-225. doi:10.34172/jlms.2020.36. Reference to a website: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7118498/

[11] Cifra M, & Pospíšil P (2014, October 5). Ultra-weak photon emission from biological samples: Definition, mechanisms, properties, detection, and applications. Journal of Photochemistry and Photobiology B: Biology, 139, 2–10. 10.1016/j.jphotobiol.2014.02.009. Reference to a webste: [PubMed] [CrossRef] [Google Scholar], https://pubmed.ncbi.nlm.nih.gov/24726298/

[12] Grasso F, Grillo C, Musumeci F, Triglia A, Rodolico G, Cammisuli F, Rinzivillo C, Fragati G, Santuccio A, & Rodolico M (1992, January). Photon emission from normal and tumor human tissues. Experientia, 48, 10–13. 10.1007/BF01923595. Reference to a website: [PubMed] [CrossRef] [Google Scholar]

[13] Kumar S, Boone K, Tuszynski J, Barclay P, & Simon C (2016, November 7). Possible existence of optical communication channels in the brain. Scientific Reports, 6, 36508 10.1038/srep36508. Reference to a website: [PMC free article] [PubMed] [CrossRef] [Google Scholar]

Declaration of interests

☐ The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

☒ The authors declare the following financial interests/personal relationships which may be considered as potential competing interests:

James Liu reports a relationship with Tesla Biohealing, Inc. that includes: employment.

Dr. Mariola Smotrys, Dr. Seth Robinson, and Suzanne Street have no conflicts of interest to declare and are responsible for the bulk of the research involving the devices. Dr. James Liu is founder of Tesla BioHealing, Inc. and inventor of the BioHealing devices. He serves as CEO of the company.