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Short Communication

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The Effect of Low Power Laser (Red and Yellow) on Depression

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Depression is a mood disorder that includes being sedentary or avoiding activity or inattention and unwillingness and can affect a person's thoughts, behavior, feelings, happiness, and well-being. People who are depressed can have feelings of discomfort, absurd anxiety, hopelessness, helplessness, despair, shame or restlessness. They may lose interest in activities that were once enjoyable, reluctant to eat, lose focus, have difficulty remembering details and making decisions, encountering problems in their relationships. And they have thought about suicide, intended to have it, and even committed suicide. Depression can also lead to insomnia, excessive sleep, feeling tired, digestive problems, or reduced body energy.

The prevalence of depression has increased in the twentieth century, especially after World War II, due to drug and alcohol use, increased stress, and decreased employment; another cause of increased depression is the underlying social change. A group of psychologists believe that the current society has created an unhealthy focus within individuals, making them too dependent on personal satisfaction and failure.

Introducing Depression

Depression has a variety of forms, the most common being major depression, with the person sometimes having a happy, temporary, and temporarily active life. One type of major depression is called melancholic depression, where the patient is never satisfied with something. About 2% of people with major depression have hallucination depression, which is usually accompanied by a sad mood. For example, they consider themselves guilty and unforgivable. About 2 percent of people with major depression also develop psychosis.

There is another type of depression called "unusual depression" that is common in its name. Symptoms of Illness Symptoms of Illness are common depressive symptoms that patients have with little or no sleep. Patients with unusual depression often sleep and eat more and gain weight quickly. According to one of the leading experts on depression (Donald Klein), unusual depression is "chronic" rather than "periodic"; puberty begins and patients are ignorant of everything.

The other type of depression is a neurosis that usually lasts about two years and its symptoms are milder than the major depression, but they always feel uncomfortable. Questionnaires and checklists such as the Beck Depression Inventory or Child Depression Inventory can be used by a healthcare provider to help diagnose and evaluate depression and its severity. Semi-structured interviews including the Kidney Questionnaire (KIDI) for the affective disorders and schizophrenia for the English abbreviation KSADS and the clinical interview for the DSM Type 2 English abbreviation: SCID are used to confirm and confirm depression. After examining the questionnaires, we include people who are depressed in our treatment group. Because we are familiar with the ability of low-power lasers to influence the treatment of depression and brain disease. To treat depression, we can treat these people using two treatment systems.

Treatment One: Because of the red wavelength range near the low power laser diode with a wavelength range of 600-808 nm, we select the maximum power of 30 MW. In this method, the laser light is projected through the nose for 15 to 30 minutes. This laser transfer will improve the patient's effect by enhancing the ATP activity of the prefrontal cortex mitochondria.

Treatment method 2: In this treatment we use yellow light beam. This type of light beam is very useful in this disease because of its special property. Yellow laser light can cure this disease by affecting the increase of sertonin and vitamin D production.

Acupoint: LR 14, CV 14, LR 8, HT 7, KI 3, CV 12 Laser yellow light property: Support the production of sertonin and vitamin D Yellow laser beam input ways to treat depression:

- 1. Through the nose
- 2. Through acupuncture points (acupuncture laser)

With these two treatments, we can treat depressed patients. The number of treatments for acupuncture laser will be up to 15 sessions, and nasal irradiation will vary from 12 to 28 sessions depending on the degree of depression. Laser sessions will be 72 hours. Citation: Ehsan Kamani, Ali Kakouei, Zahra Kamani (2020) The Effect of Low Power Laser (Red and Yellow) on Depression. Journal of Medical & Clinical Nursing. SRC/JMCN-101. DOI: doi.org/10.47363/JMCN/2020(1)101

References

- 1. Ehsan Kamani, Dev Nitin Patel, Zahra Kamani, Ali kakouei (2019) Medical Lasers. J Ophthalmol Clin Res 3: 1-3.
- 2. Zhiqiang Xu, Xiaobo Guo, Yong Yang, Donovan Tucker, Yujiao Lu, et al (2017) Low-level Laser Irradiation Improves Depression-like Behaviors in Mice 54: 4551-4559.
- 3. Jinlong Chang, Yandong Ren, Rui Wang, Chengchong Li, Yuhua Wang, et al (2018) Transcranial Low-Level Laser Therapy for Depression and Alzheimer's Disease Neuropsychiatry London 8: 477-483.
- Joon Y Kanga, Michael R. Sperlingb Epileptologist (2017) view: Laser interstitial thermal ablation for treatment of temporal lobe epilepsy Epilepsy Research 142: 149-152.
- 5. Michael J LaRiviere, Robert E (2016) Gross Stereotactic Laser Ablation for Medically intractable epilepsy: The Next Generation of Minimally invasive epilepsy Surgery Frontiers in Surgery 3: 64.
- 6. R. Medvid, A Ruiz, R J Komotar, JR Jagid, M E Ivan, et al (2015) Current Applications of MRI-Guided Laser Interstitial ThermalTherapy in the Treatment of Brain Neoplasms and Epilepsy:A Radiologic and Neurosurgical Overview Medvid 36: 11.
- Hawasli A H, Bandt S K, Hogan RE, Werner N, Leuthardt EC (2014) Laser Ablation as Treatment Strategy for Medically Refractory Dominant Insular Epilepsy: Therapeutic and Functional Considerations Stereotact Funct Neurosurg 92: 97-404.
- 8. Julio, Rojas, Gonzalez-Lima (2013) Neurological and psychological applications of transcranial lasers and LEDs Biochemical Pharmacology 86: 447-457.
- 9. Zulma Tovar-Spinoza, David Carter, David Ferrone, Yaman Eksioglu, Sean Huckins, (2013) The use of MRI-guided laser-induced thermal ablation for epilepsy Childs Nerv Syst 29: 2089-2094.
- 10. J.W. Pana, HP Zaverib, D D Spencera, H P Hetheringtona, S S Spencerb (2009) Intracranial EEG power and metabolism in human epilepsy Epilepsy Research 87: 18-24.
- 11. Marian, DiamondRuth, JohnsonCarol A.Ingham (1975) Morphological Changes in the Young, Adult and Aging Rat Cerebral Cortex, Hippocampus, and Diencephalon BEHAVIORAL BIOLOGY. 14: 163-174.
- 12. Paolo Cassano, Cristina Cusin, DavidMischoulon, Michael R Hamblin, Luis De Taboada, (2015) Near-Infrared Transcranial Radiation for Major Depressive Disorder Proof of Concept Study. Psychiatry Journal.
- Daniela Litscher Gerhard Litscher Laser Therapy Stroke (2013) Quantification of Methodological Requirements in Consideration of Yellow Laser. Hindawi Publishing Corporation International Journal of Photoenergy.
- 14. MG Hennerici, R Kern, K Szabo, (2013) Non-pharmacological strategies for the treatment of acute ischaemic stroke. The Lancet Neurology. 12: 572-584.
- 15. S. Wan, J A Parrish, R R Anderson, M Madden, (1981) Transmittance of nonionizing radiation in human tissues, Photochemistry and Photobiology. 34: 679-681.
- Yasaman Damestani , Carissa L Reynolds, Jenny Szu, Mike S Hsu, Yasuhiro Kodera, et al. (2013) Transparent nanocrystalline yttria-stabilized-zirconia calvarium prosthesis, Nanomedicine. 9: 1135-1138.
- 17. D W Barrett, F Gonzalez-Lima,(2013) Transcranial infrared laser stimulation produces beneficial cognitive and emotional effects in humans, Neuroscience. 230: 13-23.
- 18. L M Konstantinovi, M B Jeli, A Jeremi, V B Stevanovi, S D Milanovi, S R Filipovi (2013) Transcranial application of near-infrared low-level laser can modulate cortical

excitability, Lasers in Surgery and Medicine 45: 648-653.

- Jorm AF, Christensen H, Griffiths KM, Rodgers B (2002) Effectiveness of complementary and self-help treatments for depression Med J 176: 84-96.
- 20. R C Kessler , J Soukup, R B Davis, D F Foster, S A Wilkey, M I Van Rompay, et al. (2001) The use of complementary and alternative therapies to treat anxiety and depression in the United States Am J Psychiatry 158: 289-294.
- 21. Luo H, Menh F, Jia Y, Zhao X (1998) Clinical research on the therapeutic effect of electroacupuncture treatment in patients with depression Psychiatry Clinic Neurosci 52:338-340.
- 22. Christian M. Siedentopf, Florian Koppelstaetter, Ilka A. Haala, Veronika Haid, Paul Rhomberg et al. (2005) Laser acupuncture induced specific cerebral cortical and subcortical activations in humans Lasers Med Sci 20: 68-73.
- 23. V Napadow, N Kettner, J Liu, M Li, K K Kwong, et al. (2007) Hypothalamus and amygdala response to acupuncture stimuli in carpal tunnel syndrome Pain 130: 254-266.
- 24. Bin Yan , Ke Li, Jianyang Xu, Wei Wang, Kuncheng Li, et al. (2005) Acupoint-specific fMRI patterns in human brain Neurosci Lett. 383: 236-240.
- 25. Ilic S, Leichliter S, Streeter J, Oron A, DeTaboada L, et al (2006) Effects of power densities, continuous and pulse frequencies, and number of sessions of low-level laser therapy on intact rat brain Photomed Laser Surg 24: 458-466.
- Hirschl M, Katzenschlager R, Francesconi C, Kundi M (2004) Low level laser therapy in primary Raynaud's phenomenon--results of a placebo controlled, double blind intervention study J Rheumato. 31: 2408-2412.
- Oron U, Ilic S, Taboada LD, Streeter J (2007) Ga-As (808 nm) laser irradiation enhances ATP production in human neuronal cells in culture Photomed Laser Surg 25:180-182.

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