

## Application of Hypnosis in Ophthalmology: An Update

Ali Azizi 

BEHI Academy, Vancouver, BC, Canada

*Corresponding Author: Azizi A; BEHI Academy, Vancouver, BC, Canada**Email: [aliazizi.opt@gmail.com](mailto:aliazizi.opt@gmail.com)*

### Letter to Editor

**Citation:** Azizi A. **Application of Hypnosis in Ophthalmology: An Update.** *Int J Body Mind Culture* 2024; 11(3): 180-2.

Received: 20 Mar 2024

Accepted: 01 May 2024

Hypnosis was widely used as a sedation technique for a variety of surgical procedures in the 19<sup>th</sup> century. However, it was later abandoned due to the introduction of anesthetic drugs (such as nitrous oxide in 1844, ether in 1846, and chloroform in 1847) and the strong focus of contemporary scientists on the physical body as the primary therapeutic paradigm. This marginalization of the mind-body connection persisted until the mid-20<sup>th</sup> century. The advancements in neurology, phenomenology, psychology, and anesthesia in recent decades have revived interest in the application of hypnosis (Brugnoli, 2014; Facco, Bacci, & Zanette, 2021). So far, limited studies have been conducted on its use in ophthalmology. Available literature has mostly investigated the sedative effects of hypnosis on patient compatibility during ocular procedures until the 1980s (Bucalossi, 1975; Lewenstein, Iwamoto, & Schwartz, 1981). Interestingly, this line of research was largely discontinued in the ophthalmic field until recent years. To be precise, a 2018 study conducted in China shed light again on the effects of hypnosis for pain management in cataract surgery (Chen et al., 2018). Additionally, a case report from the United Kingdom (UK) described the use of a combination therapy including hypnosis to promote the management of a long-term functional vision disorder (FVD) (Yeo, Carson, & Stone, 2019). Subsequently, in two recent review articles, the use of hypnosis was suggested for intraocular pressure (IOP) reduction in patients with glaucoma (Bertelmann & Stempel, 2021), and for the management of persistent FVD (Phansalkar, Lockman, Bansal, & Moss, 2022). This mentioned gap in the clinical application of hypnosis in ophthalmology may indicate that while significant advancements have occurred in ophthalmic surgeries, there may have been limited changes in the management of anesthesia and patient comfort (Palte & Masters, 2023). On the other hand, it could represent a recurring neglect of the psychosomatic aspects of eye diseases. The Cartesian biomedical model, which objectively focuses on the physical body as a machine-like entity, may have historically placed less emphasis on the subjective descriptions of physical phenomena, as is well stated by Hippocrates: "It is more important to know what sort of person has a disease than to know what sort of

disease a person has" (Facco et al., 2021). This indicates that patients may appreciate having options beyond solely pharmacological solutions to address their pain, anxiety, vulnerability, and depression (Brugnoli, 2014). Noteworthy, it has been demonstrated that adopting a holistic mindset toward health issues and embracing integrative approaches can facilitate an individual's healing journey (Bahreini, Azizi, & Roohafza, 2024; Goli, 2023). Accordingly, the author has identified interesting applications of hypnosis in various ophthalmic subspecialties and has conducted a review of the literature, including the controversies demonstrated in such studies (Azizi, article under submission, 2024). At this time, the author proposes revisiting the use of hypnosis in ocular fields, as it could serve as a safe adjunct to conventional procedures. The future horizon for "hypno-ophthalmology" (the application of hypnosis in ophthalmology) could be broadened along this threefold map: touched areas, teleophthalmology, and untouched areas.

*Touched areas:* To expand upon the familiar results that hypnosis may have introduced so far. Hypnosis could reduce patients' mental and emotional distress, pain, medication consumption, allergic reactions, and procedure-related side effects, while enhancing their sleep quality and recovery through its psychoneurological mechanisms (Brugnoli, 2014; Facco, 2021; Holler, Koranyi, Strauss, & Rosendahl, 2021). Accordingly, hypnosis could be widely applied in minor ophthalmic surgeries (such as reconstruction surgeries and blepharoplasty) and cataract surgeries. In these contexts, hypnosis could be used as the sole sedative or in conjunction with local or general anesthesia (Fathi, Saber Moghaddam Ranjbar, Azarain, Joudi, Gharavifard, & Moghaddam, 2021).

*Teleophthalmology:* The intersection of information technology and medical practice used to provide healthcare services to remote or underserved individuals. Regarding the growing focus on teleophthalmology, the investigation and application of self-guided hypnosis through mobile phone applications could become a promising platform for expanded ophthalmic care delivery. This concept may be particularly beneficial for the treatment and follow-up of conditions such as dry eye disease (DED), allergic conjunctivitis, ocular hypertension (OHT), and post-corneal graft patients, where suggestions regarding expedited healing and proper eye drop compliance could be valuable. By leveraging teleophthalmology, it could help extend the reach of other specialized ophthalmic care to patients, thereby improving access and outcomes (Bhagat, Mansuri, & Sonarkar, 2023).

*Untouched areas:* To expand upon the unfamiliar horizons that hypnosis may be applied to in the future. There could be additional ophthalmic procedures or disease states that would potentially benefit from the wide-ranging applications of hypnosis, but have not yet been investigated. Some suggestions include using hypnosis as a sedative for refractive surgery [such as laser-assisted in-situ keratomileusis (LASIK), photorefractive keratectomy (PRK), and small incision lenticule extraction (SMILE)] or microinvasive glaucoma surgery (MIGS) where the calming and pain-relieving effects of hypnosis could enhance the patient experience and outcomes. These are just a few examples where the integration of hypnosis into ocular practice may yield promising results. Further research and clinical exploration in these and other unexplored domains could uncover new ways to leverage the potential of hypnosis-based interventions in ophthalmology.

All in all, the author encourages interdisciplinary collaborations between mind-body scientists, ophthalmologists, anesthesiologists, and hypnosis practitioners to explore the potential of hypnosis in providing a positive experience for patients during pre-, intra-, and post-operative care or dealing with their ocular diseases.

## Conflict of Interests

Authors have no conflict of interests.

## Acknowledgements

None.

## References

- Bahreini, F., Azizi, A., & Roohafza, H. (2024). Effectiveness of bioenergy economy-based health improvement versus mindfulness-based stress reduction on the occupational stress and psychosomatic symptoms of distressed employees: effectiveness of BEHI vs MBSR on distress. *Int J Body Mind Culture*, *11*(2), 106-117. doi:10.22122/ijbmc.v11i2.691 [doi].
- Bertelmann, T., & Stempel, I. (2021). Psychotherapeutic treatment options in glaucoma patients. *Klin.Monbl.Augenheilkd.*, *238*(2), 153-160. doi:10.1055/a-1244-6242 [doi]. Retrieved from PM:33618389
- Bhagat, P., Mansuri, F., & Sonarkar, G. (2023). Tele-ophthalmology: An overview. *Delhi Journal of Ophthalmology*, *33*(2), 83-86. doi:10.4103/DLJO.DLJO\_69\_23 [doi].
- Brugnoli, M. (2014). Clinical hypnosis and relaxation in surgery room, critical care and emergency, for pain and anxiety relief. *J Anesth Crit Care Open Access*, *1*(3), 00018. doi:10.15406/jaccoa.2014.01.00018 [doi].
- Bucalossi, A. (1975). Hypnosis in ophthalmology. *Minerva Med*, *66*(74), 3898-3901. Retrieved from PM:1187037
- Chen, X., Yuan, R., Chen, X., Sun, M., Lin, S., Ye, J. et al. (2018). Hypnosis intervention for the management of pain perception during cataract surgery. *J Pain Res*, *11*, 1921-1926. doi:jpr-11-1921 [pii];10.2147/JPR.S174490 [doi]. Retrieved from PM:30288086
- Facco, E. (2021). Pain, the unknown: epistemological issues and related clinical implications. *Minerva Anesthesiol.*, *87*(11), 1255-1267. doi:S0375-9393.21.15920-6 [pii];10.23736/S0375-9393.21.15920-6 [doi]. Retrieved from PM:34263590
- Facco, E., Bacci, C., & Zanette, G. (2021). Hypnosis as sole anesthesia for oral surgery: The egg of Columbus. *J Am.Dent.Assoc*, *152*(9), 756-762. doi:S0002-8177(21)00248-8 [pii];10.1016/j.adaj.2021.04.017 [doi]. Retrieved from PM:34332655
- Fathi, M., Saber Moghaddam Ranjbar, A., Azaraein, M. H., Joudi, M., Gharavifard, M., & Moghaddam, S. (2021). Hypnotic anesthesia for blepharoplasty surgery: A case report. *Arch Neurosci*, *8*(2), e101882. doi:10.5812/ans.101882 [doi].
- Goli, F. (2023). A note on defamiliarization of health; from completeness to wholeness. *Int J Body Mind Culture*, *10*(1), 1-3. doi:10.22122/ijbmc.v10i1.498 [doi].
- Holler, M., Koranyi, S., Strauss, B., & Rosendahl, J. (2021). Efficacy of hypnosis in adults undergoing surgical procedures: A meta-analytic update. *Clin Psychol Rev*, *85*, 102001. doi:S0272-7358(21)00044-1 [pii];10.1016/j.cpr.2021.102001 [doi]. Retrieved from PM:33725512
- Lewenstein, L. N., Iwamoto, K., & Schwartz, H. (1981). Hypnosis in high risk ophthalmic surgery. *Ophthalmic.Surg*, *12*(1), 39-41. Retrieved from PM:7231867
- Palte, H. D., & Masters, N. H. (2023). Contemporary anesthesia perspectives for ophthalmic surgery: A brief review. *Medical Research Archives*, *11*(8). doi:10.18103/mra.v11i8.4244 [doi]. Retrieved from https://esmed.org/MRA/mra/article/view/4244
- Phansalkar, R., Lockman, A. J., Bansal, S., & Moss, H. E. (2022). Management of functional vision disorders. *Curr Neurol.Neurosci Rep.*, *22*(4), 265-273. doi:10.1007/s11910-022-01191-w [pii];10.1007/s11910-022-01191-w [doi]. Retrieved from PM:35320465
- Yeo, J. M., Carson, A., & Stone, J. (2019). Seeing again: treatment of functional visual loss. *Pract.Neurol.*, *19*(2), 168-172. doi:practneurol-2018-002092 [pii];10.1136/practneurol-2018-002092 [doi]. Retrieved from PM:30872460