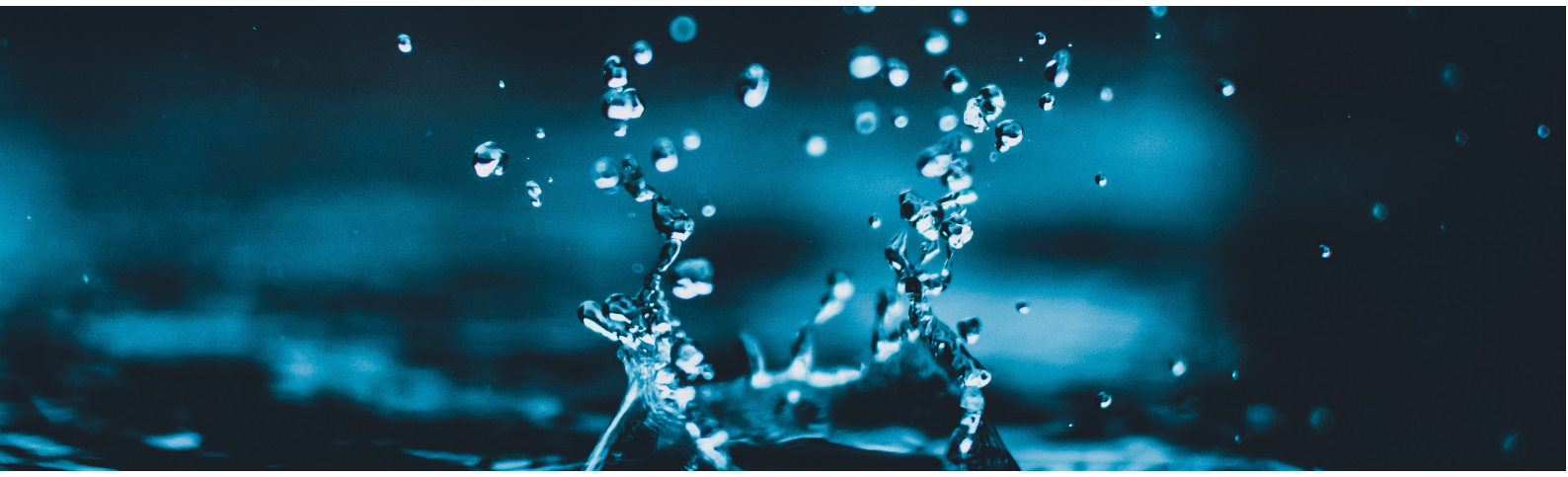


EYE RESEARCH CENTER

WINTER 2022 E-NEWSLETTER



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Research News

Author

Stuart Richer, OD., Ph.D., FAAO

Title

The New Biology of Water

Summary

Water is the most fundamental building block of life and is essential and sacred to our existence.

70 % of the earth's surface is water and 99 % of our bodies are water, on a molecular basis.

Water quenches our thirst, is contained within food, sustains and rejuvenates us through its role in biochemical reactions such as photosynthesis, respiration, the mitochondrial electron transport chain and the bicarbonate buffering system.

Water is adaptable & flexible existing as Solid (ice), Liquid (water) & Steam (gas) as well as the newly discovered 4th state of water called "Exclusion Zone Water" accountable for previous unexplainable oddities such as how water can reach the top of a 100-meter redwood tree or spread across the surface of a contact lens. This newly appreciated knowledge of water, including its ability to act as a 'liquid informational crystal' is important to doctors because we evolved from the ocean, and conscious consumption of high quality water eventually provides superior cytoplasmic cellular organization, function and protection against myriad diseases.

Doctors are becoming more appreciative of the various aspects and central importance of water. This includes its' purification, structure, mineralization and storage. Only through this knowledge can the maintenance and rejuvenation of water's potential life force, support the superior health of ourselves and patients. For a complete discussion of the new science of water, the following 4 books are highly recommended.

- Pollack, Gerald H, The 4th Phase of Water, Beyond Solid, Liquid & Vapor, 2013,, Ebner & Sons Publishers, Seattle, WA, ISBN 978-0-9626895-4-3 357 pages
- Pangman MJ, Evans M, Dancing with Water, 2nd Edition, Uplifting Press, 2017, ISBN 978-0-9752726-3-3, 285 pages.
- Emoto, Masaru (2004). The Hidden Messages in Water. Hillsboro, Oregon, United States: Beyond Words Publishers, 2014, ISBN 9781582701141, 159 pages.
- Cowan T, Cancer and the New Biology of Water, Chelsea Green Publishing, White River Junction, VT, 2019, ISBN 9781603588812, 194 pages.

EYE RESEARCH CENTER

WINTER 2022 E-NEWSLETTER



Research News

Author

Aaron McNulty, OD., FAAO

Title

Transient Retinal Ischemia Represents a Medical Emergency

Summary

Recently, awareness in the eye care community has increased regarding the emergency management of retinal ischemia. A 2017 survey reported a significant disparity in the way that retinal specialists and neurologists handle acute central retinal artery occlusion. In the study, 73% of neurologists reported that they send patients with this condition to an emergency department for immediate evaluation. In contrast, only 18% of retina specialists reported the same practice pattern (1). More recently, efforts have been made to increase awareness in the eyecare community to bridge this disparity.

Several ocular signs and symptoms can be indicative of acute retinal ischemia. Central retinal artery occlusion and branch retinal artery occlusion are perhaps the most universally concerning. However, transient monocular vision loss (TMVL) also falls under this umbrella. By definition, all of these findings qualify as transient ischemic attacks (TIAs), since the tissue-based definition of this term includes transient episodes of retinal ischemia (2).

The diagnosis of CRAO or BRAO is typically fairly straightforward. The diagnosis of TMVL can be a bit more nuanced. This entity should not be confused with temporary vision changes from nonvascular causes such as migraines, angle closure glaucoma, ocular surface disease, or media opacities in the vitreous. Although we classically associate ischemia with a "blacking out" or darkening of vision, a minority of TIAs present with positive visual phenomena such as photopsias or scintillating scotomas. Therefore, these latter symptoms do not necessarily rule out an ischemic cause (3,4).

The patient presenting with transient visual changes requires a complete workup and a very careful clinical history. If the clinical case is suggestive of transient retinal ischemia, the patient must be sent immediately to the nearest emergency department for a stroke workup (5).

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Research News

Author

Mashaeh Al-Namaeh, OD., Ph.D., FAAO

Title

Vitamin D Role in COVID-19

Summary

Because vitamin D is required for both the innate and adaptive immune systems, as well as the antimicrobial and anti-inflammatory systems, determining its function during COVID-19 stands to reason. COVIT-Trials are the first randomized clinical trials that demonstrated the efficacy and tolerability of vitamin D in high-risk COVID-19 patients (1). An open label pilot study found that 25-hydroxyvitamin D (25(OH)D) significantly reduced the need for intensive care unit (ICU) treatment due to COVID-19 (2). Similarly, a meta-analysis found that vitamin D supplementation reduced the severity of COVID-19 in hospitalized patients (3). In addition, vitamin D deficiency could be used as a biomarker to predict the severity of COVID-19 patient (4). Furthermore, in COVID-19 infection, 25(OH)D concentration could be perceived as a negative acute phase reactant with a poor prognosis (5). Other investigations, on the other hand, found no significant benefits from vitamin D supplementation in COVID-19 severity (6) and did not decrease the mortality death (7,8). In conclusion, further retrospective studies with a large number of participants are needed to identify the optimal dosing and duration of vitamin D supplementation.

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Upcoming Events

Interactive Online Webinar

Check the website for registration info.

Profits from selected events will be contributed to apda in the amount of 30%.

Partnership



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