

Studien zu Yoga und Anfallsleiden

Seizure. 2001 Jan;10(1):7-12. Yardi N.

Yoga for control of epilepsy.

Yoga is an age-old traditional Indian psycho-philosophical-cultural method of leading one's life, that alleviates stress, induces relaxation and provides multiple health benefits to the person following its system. It is a method of controlling the mind through the union of an individual's dormant energy with the universal energy. Commonly practiced yoga methods are «Pranayama» (controlled deep breathing), «Asanas» (physical postures) and «Dhyana» (meditation) admixed in varying proportions with differing philosophic ideas. A review of yoga in relation to epilepsy encompasses not only seizure control but also many factors dealing with overall quality-of-life issues (QOI). This paper reviews articles related to yoga and epilepsy, seizures, EEG, autonomic changes, neuro-psychology, limbic system, arousal, sleep, brain plasticity, motor performance, brain imaging studies, and rehabilitation. There is a dearth of randomized, blinded, controlled studies related to yoga and seizure control. A multi-centre, cross-cultural, preferably blinded (difficult for yoga), well-randomized controlled trial, especially using a single yogic technique in a homogeneous population such as Juvenile myoclonic epilepsy is justified to find out how yoga affects seizure control and QOI of the person with epilepsy.

Med Hypotheses. 2012 May;78(5):571-9. Streeter CC, Gerbarg PI, Saper RB, Ciraulo DA, Brown RP.

Effects of yoga on the autonomic nervous system, gamma-aminobutyric acid, and allostasis in epilepsy, depression, and post-traumatic stress disorder.

A theory is proposed to explain the benefits of yoga practices in diverse, frequently comorbid medical conditions based on the concept that yoga practices reduce allostatic load in stress response systems such that optimal homeostasis is restored. It is hypothesized that stress induces

- (1) imbalance of the autonomic nervous system (ANS) with decreased parasympathetic nervous system (PNS) and increased sympathetic nervous system (SNS) activity,
- (2) underactivity of the gamma amino-butyric acid (GABA) system, the primary inhibitory neurotransmitter system, and
- (3) increased allostatic load. It is further hypothesized that yoga-based practices
- (4) correct underactivity of the PNS and GABA systems in part through stimulation of the vagus nerves, the main peripheral pathway of the PNS, and
- (5) reduce allostatic load.

Depression, epilepsy, posttraumatic stress disorder (PTSD), and chronic pain exemplify medical conditions that are exacerbated by stress, have low heart rate variability (HRV) and low GABAergic activity, respond to pharmacologic agents that increase activity of the GABA system, and show symptom improvement in response to yoga-based interventions. The observation that treatment resistant cases of epilepsy and depression respond to vagal nerve stimulation corroborates the need to correct PNS underactivity as part of a successful treatment plan in some cases. According to the proposed theory, the decreased PNS and GABAergic activity that underlies stress-related disorders can be corrected by yoga practices resulting in amelioration of disease symptoms. This has far-reaching implications for the integration of yoga-based practices in the treatment of a broad array of disorders exacerbated by stress.