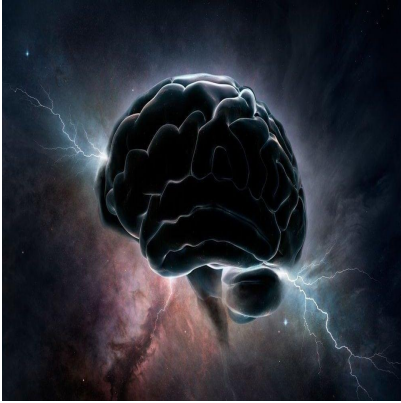




Yoga & Epilepsy

Description

About Epilepsy



Epilepsy is a disorder caused by the increased electrical activity of neurons in some area of the brain. The affected person can suffer a series of uncontrolled convulsions or body movements in a repetitive manner. This is called an epileptic attack. Epilepsy has its origin in brief and sudden changes in the functioning of the brain. For this reason, it is a neurological condition. Health Bodha, Epilepsy: Symptoms, Causes and Treatments

Introduction

- Epilepsy is characterized by unprovoked seizures.
- Seizures occur as a result of a dysregulated electrical event in the brain.
- To be considered epilepsy, the seizures must be recurrent.
- “Epilepsy is a disorder with many possible causes. Anything that prevents or distorts the pattern of normal neuronal activity can lead to the onset of an epileptic seizure.” (Health Bodha)
- Some causes of epilepsy include genetic disorder, brain injury, and stroke. For many people, the cause is unknown.

Symptoms

- Epilepsy can manifest in a wide range of seizure types, depending upon the part of the brain involved.
- Some people recognize a seizure hours or days before it happens. Others are unaware of any warning signs.
- People with epilepsy often experience [mental health issues](#), particularly [anxiety](#) or [depression](#). This may be a side effect of medications or related to the difficulty dealing with the condition.

Epilepsy & The Vagus Nerve

- “People with low vagal tone [referring to the functional state of the vagus nerve] are more prone to stress and can easily fall prey to epilepsy.” (Ram Rao PhD)
- Some epileptic patients have a Vagus Nerve Stimulator (VNS) implanted under the skin of their chest. When the VNS is activated, bursts of electrical energy are sent through the vagus nerve to the brain. The VNS has been shown to inhibit seizures by 20-40%.
- See more: [Anatomy: The Vagus Nerve](#)

Research



Improved quality of life for people with neurological disorders: improved balance, strength, mobility, mood; reduced pain, tremors; more (2017)

[link](#) and [link](#)

- Research review to identify yoga's impact on people with neurological disorders including stroke, Parkinson's disease, Alzheimer's disease and dementia, multiple sclerosis, and epilepsy
- Benefits associated with the practice of yoga included: improved balance, physical strength, mobility and flexibility, reduced pain, improved cardiac and respiratory fitness, reduced tremors in patients with Parkinson's disease. Mood and quality of life also showed improvement.

- Additional findings: Limit age-related decline in brain function. Patients with dementia: improved proprioception, memory, cognition, mental health and emotional health.
- Published in the Journal of Clinical Neuroscience

Randomized control trial with epilepsy patients: Improvements in seizure duration & frequency (2015) [link](#)

- Randomized control trial
- Seizure duration was reduced more than 50% in 7 of 10 patients treated with yoga compared to none among 22 controls
- Nine patients in the yoga group had a 50% reduction in seizure frequency compared to one in the control group
- Four patients treated with yoga were seizure-free for six months compared to none in the control group.

Meditation reduced seizure frequency in epilepsy patients (2006) [link](#)

- 20 people with drug resistant chronic epilepsy
- Meditation protocol: 20 minutes 2x day at home + supervised sessions every week for three months; research continued beyond 3 months but with meditation optional among participants
- At 3 months, a reduction in seizure frequency was noted in all but 1 patient. Fourteen patients responded at 6 months. Six were seizure-free for three months. Eight patients responded beyond six months and three were seizure-free for 6 months.
- Journal of Alternative and Complimentary Medicine

Small randomized control trial: Reduced seizure frequency & duration in epilepsy patients (2001) [link](#)

- Meditation group: 11 adults with drug resistant epilepsy, meditation 20 minutes daily for one year
- Control group: 9 people
- The meditation group showed a significant reduction in seizure frequency and duration. Control patients did not show any significant changes.

Randomized control trial: Improved parasympathetic parameters & decreased seizure frequency in epileptic patients compared to exercise control group (2008) [link](#)

- Yoga group: 18 people received supervised yoga, 10 weeks of daily practice
- Exercise group: 16 people practiced simple routine exercise
- Examined the effects of posture, breathing and meditation on automatic functions of epileptic patients
- The yoga group showed significant improvement in parasympathetic parameters and decreased seizure frequency

See Also



- [Research on the Impact of Yoga: Brain Structure & Function](#)
- [Research on the Impact of Yoga: Mental Health & Trauma](#)
- [Research on the Impact of Yoga: Pain, Inflammation & Specific Conditions](#)

Contraindications

- Hot Yoga is contraindicated for people with epilepsy. (Timothy McCall MD)
- In Yoga Practices for Epilepsy, Dr. Rita Khanna recommends particular inversions but states that *Sirsasana* (Headstand) is contraindicated.

Take Care

Maitri Jones offers these cautions:

- Students are cautioned to avoid overexertion.
- If an unexpected seizure occurs, there is a risk of falling. Thus, avoid the full expression of postures that could cause injury if fallen out of.

However, suggesting restrictions without consulting the student can lead to unnecessary fear:

[When] I told the teacher I had epilepsy she said “ah, so you mustn’t do any inversions.” In another class, a teacher asked me to wait in Savasana (Corpse pose) while the rest of the students were doing pranayama practice. When I mentioned it to my neurologist, he said there was no reason why I shouldn’t be doing those things, as long as I was aware of what was going on and stopped if anything didn’t feel right as in any other situation. Izzy Arcoleo

Dr. Rita Khanna notes the importance of practicing a long *Savasana*:

After performing [inversions] it is essential to perform Savasana. We should perform Savasana for half the period for which we perform the main asana. Dr. Rita Khanna

In the Case of a Seizure

- Be prepared in the case of a student experiencing a seizure.
- One general source for consideration is WebMD: What to Do When Someone Has a Seizure.
- Advise students to inform you of how epilepsy manifests for them, and how they want you to respond.

How Yoga Can Help



After finding out that my brain has a penchant for electrical malfunction—and that my biggest trigger for seizures is stress—asana and meditation became a much bigger part of my life! I began to practise five or six days a week and very quickly felt the difference; I was calmer and, quite simply, had fewer seizures on days when I practised, than on days when I didn’t. — Izzy Arcoleo

Timothy McCall MD lists epilepsy as one of the many health conditions shown by scientific studies to benefit from the practice of yoga. (See Research above for specific examples.)

- Stress is considered a precipitating factor for some seizures. Thus, yoga’s effectiveness is presumed to be in part from its stress-reducing effects and ability to balance the nervous system.
- Dr. Rita Khanna notes that inversions can help students with epilepsy by bringing additional blood flow to the head.
- “Forward bending and inverted postures help in bringing awareness and concentration to the head region—increasing sensory-motor rhythm, decreasing stress and possibly influencing brain plasticity.” (Dr. Rita Khanna)
- Yoga *asana* helps to stretch the nerves and oxygenate the brain. (Ramya Achanta)
- Yoga seeks to reestablish a balance (union) among the aspects of a person’s health that cause seizures. (Indian Mirror)
- Yoga practice can lead to greater self-compassion, bringing students more overall peace.

Yoga Practices



Multiple Options for Consideration

While there are some suggestions that are recommended by multiple sources, there are differences as well.

- Some practices that were recommended by multiple sources we referred to include: [Nadi Shodhana \(Alternate Nostril Breathing\)](#), [Meditation](#), and [Forward Bends](#).
- Please be sure you’ve reviewed [Inversions](#) as a category for cautions and considerations.
- Other categories of poses are cited by various sources as well.
- As always, it’s advisable to think about the individual you’re designing a sequence for and to experiment and adapt according to the results.



Forward Bends & Relaxation

Today I practice mostly hatha yoga, integrating a wide variety of forward folds. However, I make sure to have a complete practice in order to slow down my breathing and thinking. The relaxation and forward bending, along with the breathing and meditation, lower my seizure threshold and work to strengthen and repair my body. â?? Sharon Powell

Meditation & Inversions

In Yoga for Epilepsy, the Indian Mirror suggests these â??yoga poses for epilepsy:â?•

- [Meditation](#)
- [Sarvangasana \(Shoulderstand\)](#)
- [Sirsasana \(Headstand\)](#)
- [Halasana \(Plow Pose\)](#)
- [Savasana \(Corpse Pose\)](#)

Izzyâ??s Top 5 Yoga Practices for Epilepsy

These are from Izzy Arcoleo:

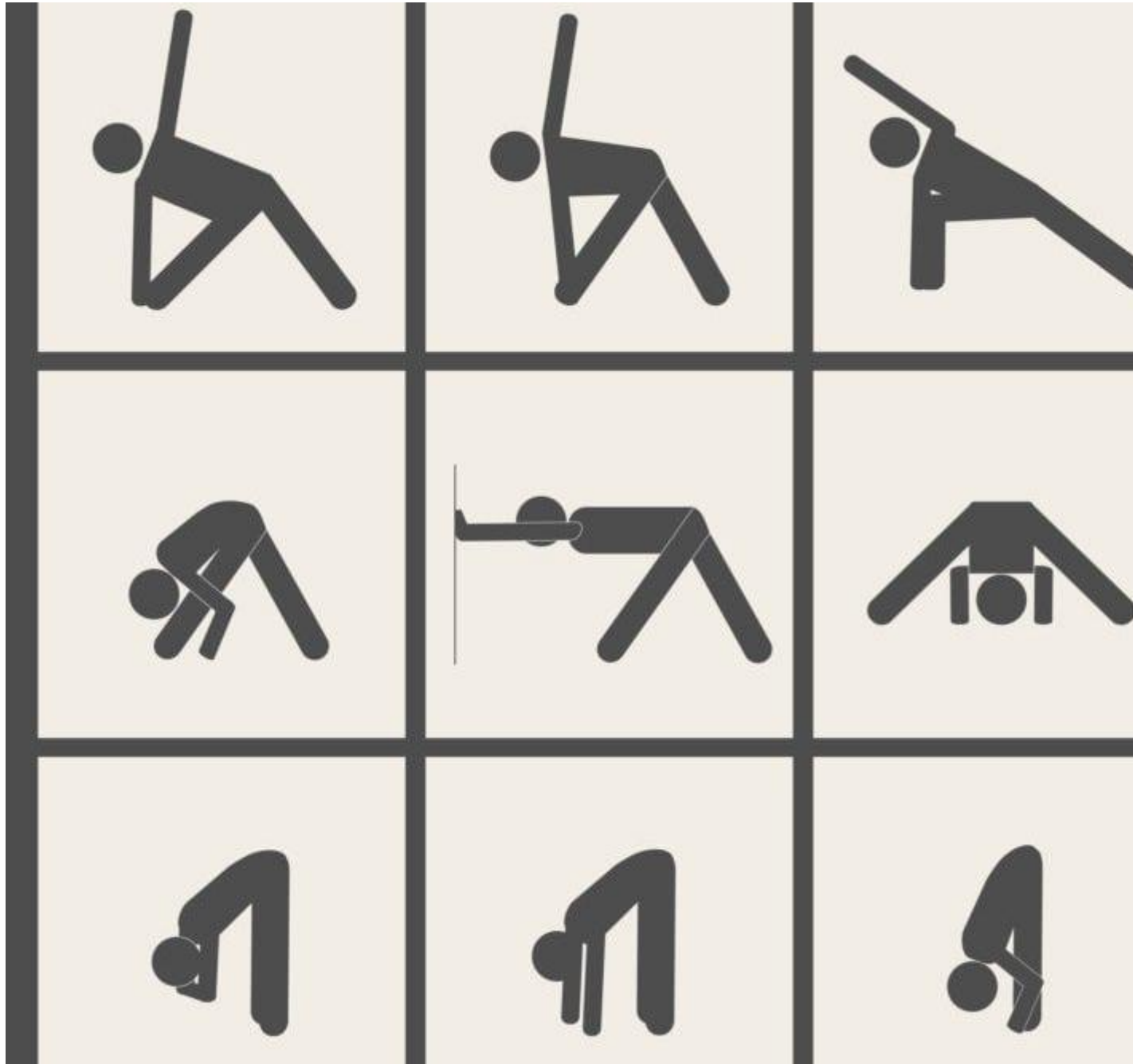
- [Balasana \(Childâ??s Pose\)](#)
- [Nadi Shodhana \(Alternate Nostril Breathing\)](#)
- [Eka Pada Rajakapotasana \(One Legged King Pigeon Pose\)](#)
- [Sirsasana \(Headstand\)](#)
- [Camatkarasana \(Wild Thing\)](#)

Inversions & Pranayama

In Yoga Therapy for Epilepsy, Asana International Yoga Journal notes that these â??are a few important *asanas* and *pranayama*.â?•

- [Viparita Karani \(Inverted Action / Legs Up the Wall\)](#)
- [Nadi Shodhana \(Alternate Nostril Breathing\)](#)
- [Meditation](#)
- [Urdhva Hastasana \(Upward Salute\)](#) â?? shows variation with hands clasped and palms turned upward
- [Adho Mukha Svanasana \(Downward Facing Dog\)](#)
- [Salamba Sirsasana \(Supported Headstand\)](#) â?? Note that Dr Khanna says this pose is contraindicated

Sample Sequences



Dr. Rita Khanna's Recommendations

In Yoga Practices for Epilepsy, Dr. Rita Khanna recommends the following:

1. [Eka Pada Urdhva Prasarita Padasana \(One Legged Upward Stretched Legs\)](#) â?? Exhale, bring leg up 30 degrees. Hold 20 seconds. while breathing normally. Alternate legs. Repeat multiple times.
2. [Urdhva Prasarita Padasana \(One Legged Upward Stretched Legs\)](#) â?? Repeat Pose #1 with both legs, building up to a hold of 90 seconds minimum
3. [Salamba Sarvangasana \(Supported Shoulderstand\)](#)
4. [Ardha Sarvangasana \(Half Shoulderstand\)](#) or [Vipariti Karani \(Inverted Action / Legs Up the Wall\)](#)



5. [Savasana \(Corpse Pose\)](#) â?? â??After performing [inversions] it is essential to perform Savasana. We should perform Savasana for half the period for which we perform the main asana.â?•
6. Seated Forward Bend â?? Sit in Vajrasana with the back straight. Slowly inhale and raise both the hands upwards. Now exhale, and bend forward slowly. Touch your palms on the floor by stretching the arms but without bending the elbows. Now place your head on the floor with the abdomen pressed to the thighs. Do not raise the buttocks. Hold this position.
7. [Neck Stretches](#) â?? â??A patient of convulsions can profitably use the process of turning the neck from right to left and left to right on the front side and back side as well as turning the head in circular motion in both directions.â?•
8. [Chant Om](#)
9. [Bhramari Pranayama](#)
10. [Nadi Shodhana Pranayama \(Alternate Nostril Breathing\)](#) â?? â??an unfailing panacea for mental peace and composure. If one keeps oneself slightly aware of this process [of breathing], then a very good achievement can be had in avoiding cerebral disorder.â?•

In Yoga, The Path to Holistic Health, B.K.S. Iyengar suggests the following sequence for people with epilepsy.

1. Supta Virasana
2. Supta Baddhakonasana
3. Uttanasana
4. Adhomukkha svanasana
5. Salamba Sirasana
6. Viparita dandasana
7. Urdhvamukha Janu Sirasana
8. Salamba Sarvangasana
9. Setubhanda Sarvangasana
10. Viparita Karani
11. Savasana

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