

# Remediation of Health Challenges During the Space Voyage Through Soul Meditational Pharmacotherapy ‘(Sm PT)’

Virendra Goswami\*

Indian Institute of Technology & Environment and Peace Foundation Formerly, Univ. of Wisconsin & Univ. of Illinois, USA

## \*Corresponding Author

Virendra Goswami, Indian Institute of Technology & Environment and Peace Foundation Formerly, Univ. of Wisconsin & Univ. of Illinois, USA.

Submitted: 2024, Dec 30; Accepted: 2025, Jan 23; Published: 2025, Jan 29

**Citation:** Goswami, V. (2025). Remediation of Health Challenges During the Space Voyage Through Soul Meditational Pharmacotherapy ‘(Sm PT)’. *Space Sci J*, 2(1), 1- 10.

## Abstract

From day one of entering space voyage almost all the astronauts/Cosmonauts have reported severe Neurological/ Neurodegenerative Disorders, affecting the brain, spinal cord, and nerves in the body resulting in structural, biochemical, or electrical abnormalities, like migraine, tension-type headaches during long-haul space flight, commonly known as Space-headache.

Vertigo, as well as there are chances of being caught with Vertigo as well as neurodegenerative autoimmune (Sjogren) diseases; related to Non- Arteritis Ischemic Optic Neuropathy (NAION), resulting from Zero-gravity effect in space amalgamated with negligible available natural oxygen and dependency on portable oxygen. It's 'non- arteritis' because there is reduced blood flow without true inflammation of the blood vessels.

It's an innovative, non-invasive, and affordable 'Meditational Flares Therapy' ('MFT') for the Remediation of Neurological & Neurodegenerative Diseases and may be performed very conveniently during space -voyages, without any side effects

**Keywords:** Ai-Driven Renewable Energy, Smart Grid Optimization, Energy Forecasting, Sustainable Power Systems, Grid Resilience, Machine Learning in Energy

## 1. Introduction

From the days of the Apollo program (US human Space flight program), 1960 to 1970, when the first human astronaut Neil Armstrong landed/ walked on the Moon's surface (Apollo-11, 21 Jul 1969). Fortunately, there have been no incidences of the death of any Astronaut/Cosmonaut in a space voyage except the unfortunate incidences of failure of a space mission (STS-107), the final flight of Space Shuttle Columbia disaster, when the Space-Craft disintegrated during its re-entry into the Earth's atmosphere, wherein, all the seven space-crew members died on 01 Feb'2003 along with the first Indian born woman American NASA-Astronaut and aerospace engineer Kalpana Chawla.

Recently, on 04 Apr'24, the author (Dr. Virendra Goswami) submitted his research paper entitled 'Remediation of Space headaches through the Synchronization of 'Soul-meditational Thera-

py' & Pharmacotherapy i.e. 'Soul meditational Pharmacotherapy (SmPT.) to the United Nations Office for Outer Space Affairs (UN-OOSA) Symposium, 17-18 Jul 24 Austria, based on his earlier published and patented research work entitled *An Innovative 'Virendra Goswami Soul Meditational Therapy' (VG- Sm FT) for Remediation of Ophthalmological & Neurodegenerative diseases. Patent /Copy Right # I-131230/2023, Dated 31.07.2023, Dr. Virendra Goswami, Copy Right Office, Intellectual Property Rights (IPR), Government of India.*

Having suffered with unprecedented global epidemic COVID-19 Coronavirus the author experimented on himself by studying the correlation of Oxy- Volume (Oxygen Volume) after 'Soul meditation'(Sm) and before 'Soul meditation'(Sm); by using an Oxy-Pulse meter for about 60 days in continuation, and observed that there was an increase by 1.0 cc of oxy-volume after 30 minutes

performance of the Sm and the 2.0cc increase in the Oxy-Volume in the 60 minutes performance. This gave a clue to the remediation of Space headaches during Space-voyage by performing the ‘Soul meditation’(Sm); by the Astronauts/ Cosmonauts.

The intensity and frequency of these Space headaches are observed after 10 days or less space voyage. Space headaches have nothing to do with chronic headaches as the same astronauts not having any kind of headache with nil neurological and neurodegenerative disorders have experienced this very Space headache during long-haul space flights and had never dealt with recurrent headaches on Earth. It happens to them during their stint in microgravity with the symptoms of pain, sensitivity to light, and including pain, sensitivity to light, and occasionally nausea. @Journal of Neurology,13 March’24 showed that these mysterious "space headaches" are quite common. Also, the microgravity in space results in ailments like Blood begins to pool in the torso and head, facial swelling, and sometimes visual impairments. The fluid in the inner ear that helps us keep our balance is also disrupted by the lack of gravity, leading to disorientation and motion sickness. It also mentions that Pharmacotherapy (aspirin, Gabapentin, and other pain-relieving drugs;), exercise, and sleep helped to give relief to the Space headaches.

Lately, on 17 Mar 24, the author Dr. Virendra Goswami sent his research Paper entitled ‘Correlational Study of ‘Virendra Goswami Meditational Flare Therapy (VG-MFT) & Pharmacotherapy for Remediation of Neurological /Neurodegenerative Disorders’, in Academia Medicine Journal for publication on the invitation of the Editor-in-Chief.

In his 48-month-long tested, patented, and innovative technology of ‘VGMF-Neuro- Therapy’ comprises ‘Meditational Flare’ observed during ‘Soul-meditation (Sm)’ i.e. meditation of soul, the severe ophthalmological irreversible disorder wherein; the optic nerve gets damaged leading to blindness, does get improved and the Intraocular Pressure (IOP) stabilizes to the permissible values of 10-12 or so. It’s presumed that increased intracranial pressure brought on by the redistributed fluids in the astronaut's body should significantly reduce, and blood, lymph, and cerebrospinal fluid drift from their usual locations should be stabilized by reducing the increased intracranial pressure in the astronaut's body, the probable cause of space headache and the neurological/neurodegenerative disorders.

Next, it aims to confirm through clinical investigations; the origin, morphological features e.g. inverted cone shape, light patches, appearing, disappearing, Light Clusters (Lc) or Glimpses/Flares, and dynamical properties viz. GMF- photons i.e. luminous moving flares with the near speed of light, of VGMFs & (Sm) and its correlations with neurological, neurodegenerative disorders have been drawn along with derived mathematical equations viz. (Sm-Eqn., VGMFs -Entropy, VGMFs - Stress, Headache- VGMFs & Respiratory-VGMFs) to understand its qualitative and quantitative features to control health diseases and the other few health disorders through affordable non-medicinal and non-invasive meditational techniques (VGMF- Sm), involving Conscious, Space, and Time.

## 2. Preliminary Research Design and Methods

The present Correlational Combinatorial research is designed to pursue Clinical investigations with two Objectives viz.to Control Neurological Disorders affecting the brain, spinal cord, and nerves in the body resulting in structural, biochemical,, or electrical abnormalities, like (migraine-headache bipolar disorder, hyponatremia, Vertigo, Seizures, Stroke.)& Neurodegenerative Disorders (Alzheimer's disease, multiple sclerosis, Parkinson's disease and amyotrophic lateral sclerosis that negatively affect, mental and physical functioning), through affordable, non-invasive, innovative technology of Meditational Flares (MF); observed during ‘Soul- meditation (Sm) i. e. meditation through the Soul amalgamated with Pharmacotherapy.

## 3. VG-Meditational Flares(MFs)

The clinical investigations have been done to confirm the origin of VG -Meditational Flares(MFs) during the Soul Meditation (Sm) as well as it’s observed Morphological features e. g. inverted cone shaped, light patches, appearing, disappearing, Light Clusters (Lc) or Flares of creamed colour in appearance alike Gamma-ray burst- ‘Black-Holes-Wobbles’ & Dynamical features viz. MF- Photons i. e. luminous moving flares with the near speed of light during the (SmT10+), depicted in Figure 1.

Further, it is observed that the VGMFs do appear during the (Sm) like ‘‘Barred Spiral’’ with diffuse dispersed creamy colored glow light flares like undefined celestial body nebula matching in appearance with the few characteristics of recently found Andromeda Galaxy in 2019 (Figure 2), except on the rare occasions (1- 2% ), observed during Enlightenment phenomenon due to Coalescence of VGMFs .



Figure 1: GMFs Nearly Appear like ‘Black Hole Wobbles’ Gamma-Ray Bursts

---

Most of the time (98-99%), the GMFs do appear during the Soul meditation (Sm) like ‘Black Hole Wobbles’ Gamma-ray bursts (Fig.1).



**Figure 2: GMFs Nearly Appear like Andromeda Galax (Barred Spiral Galaxy)**

In my view, the creation of VGMF is due to its Potential Energy (P.E), which gets generated during Soul meditation (Sm) of (T10+) minutes, and it can be estimated quantitatively. After (T10+5) minutes, these VGMFs gain momentum probably due to the Kinetic Energy (K.E) of ‘GMF-photons’. During Soul meditation (Sm), Mind(M) is in rest i.e.  $KE = 0$ .

Perhaps, the observed (clockwise i.e. anticyclonic) motion of the VGMFs may be related to its diverging flares appearance from its centre (Figure 1). In other words, the GMFs divergence nature attributes to the stability/balancing of the VGMFs atmosphere/ Cosmos while the Cyclonic (Anti-clockwise) circulation creates instability/imbalance in the atmosphere, giving rise to convergence and entropy (disorderliness).

As observed during the (SmT10+), the VGMFs are alike ‘gamma-ray bursts, seem to focus their energy on a narrow clockwise revolving beam, rather than emitting it equally in every direction. This property of the GMFs- is in conformity with the discovery of Swiss Scientist Merlin Kole, who discovered in 2019 that Gamma-ray bursts seem to focus their energy on a narrow beam, rather than emitting it equally in every direction.

Also, it has been observed during the last nineteen months performance of the Soul meditation (Sm) that the frictional Heat (H), generated by the rubbing of palms (Joule-Thomson Effect i.e. Heat produces when work is done); when are put on closed eyes during the Soul meditation (Sm), then the formation of GMF gets accelerated (catalyzed).

The ‘Soul meditation (Sm)’ is a sort of meditation in solitude, performed preferably during the ‘Braham Mahurat’ i. e 1-2 hours before Sunrise in the defined posture (sitting in squatting Position making 90-degree angle between waist- neck-head) and synchronizing Body, Mind, Soul. The Body should be in relaxed mode and Mind be focused on one imaginary point (selected in the centre of the forehead aligned to the nose) & stress free with no thoughts preferably. @ VG: Soul meditation (Sm) Equation’:

Technically, (Sm) is the result of the addition (‘Yoga’) of the three viz. Body(B) + Mind(M) + Soul(S). Mathematically,  $(Sm) = (B + M + S) > (1)$  Eqn. say.

The proposed ‘Sm FT’, would be further clinically modified, designed, and experimented on apparently healthy volunteers. before experimenting on healthy patients (Nil Neurological and Neurodegenerative disorders) & non-healthy patients (with Neurological, and neurodegenerative diseases). It aims to take up Correlational cum Combinatorial Studies of innovative ‘Virendra Goswami Meditational Flare (VG-MF) observed during Soul meditation (Sm) with Pharmacotherapy (Allopathy) in the management of Neurologic-neurodegenerative diseases, and efficacy of these VG-Soul meditational Flare Therapy and Allopathic treatment, evaluated by clinical criteria.

Both these non-conventional meditational techniques have been experimented for the last 48 months, by the author, himself being a chronic patient of headache from adolescence, followed lately, with Open Angle Glaucoma since 2015or so. Next, it has been observed after performing for 3 months daily,30 minutes the Soul meditation (Sm) in the defined posture, that the observed (clockwise i.e. anticyclonic) motion of the VGMFs with its diverging flares appearance from its centre, attributes to the stability of VGMFs -Photons, maintaining electrolytic-balance through the neurons in the cerebrum/cortex of the human brain, associated with higher brain function viz. thoughts and action vis-à-vis Stress.

Glaucoma is severe ophthalmological irreversible disorder wherein; the optic nerve gets damaged leading to blindness. The healthy optic nerve is a pillar of good vision, and it gets damaged by an abnormally high pressure in the eye. Nervous disorders like Severe headache, migraine, nausea and Stress are related to Pigmentary glaucoma, if not treated on time, it may cause blindness. Sometimes, during jogging and strenuous exercises, these pigment granules get deposited on the trabecular meshwork and result intermittent pressure elevations.

The innovative technologies acronym 'SmF- Therapy 'to Glaucoma patients i.e. MF- GLAUCOMA THERPY (MGT) & MF-Colour Doppler Imaging (MF-CID)' i.e. (improved version of)/ Colour Doppler Ultrasound Imaging of the Eye and Orbit would be used to identify even very small blood vessels, from which measures of blood velocity and vascular resistance can be obtained to evaluate orbital vasculature. MF- Photons seem to be spotted by the images formed on the Retina of the eyes through the Retina imageries.

Similarly, an innovative technology acronym 'VG-NMFT'(Virendra Goswami Neuro-Meditational Flare Therapy')and 'VG-NFT-Colour-Doppler- Imaging(CID) in combination with Brain-Colour Doppler Imaging(Carotid Doppler is a diagnostic technique to identify the circulation in the large arteries of the neck) may be developed for Neurological-Neurdegenerative patients to identify even very small blood vessels, through the optic nerve from which measures of blood velocity and vascular resistance can be obtained to evaluate orbital vasculature. If so, then MFs can be photographed, catalogue qualitatively and quantitatively to study their morphological and dynamical properties by the improved 'Colour Doppler Ultrasound Imaging of the Eye and Orbit', abbreviated as 'MF-CID', and 'VG-NFT- Colour-Doppler-Imaging (CID), during the (SmT10+) onward. This improved Colour-Doppler Imaging i.e. 'MF-CID' & 'VG\_NFT\_CID' would be a non-invasive ultrasound procedure permitting simultaneous Grayscale imaging of structure and color-coded imaging of the MFs as well as the blood velocity of the blood vessels of the Eye and the neurons in the cerebrum/cortex of the human brain.

The author pursued clinical investigations, to evolve non-invasive, affordable meditational techniques to Control health diseases associated with neurological disorders(migraine, bipolar-disorder, hyponatremia, Dementia, Epilepsy, Vertigo, Seizures, Stroke),related to nonarthritic ischemic optic neuropathy through affordable, non-invasive, innovative technology of 'VGMF-Neuro-Therapy'.

Finally, based on Trabeculoplasty (tra-beck-you-low-plas-tee) i.e LASER –Treatment, an innovative technology has been proposed, acronym 'Soul-meditational Flares Amplification Stimulated Emitted Radiation ('Sm-FASER')-Therapy for the treatment of ophthalmological & (VG-NMFT' for Neurological Disorders respectively would be developed.

Correlation of GMFs & Neurological Disorders (Migraine Headache). i.e. (VG: Headache -GMF) Eqn. From 'VGMF- Disorderliness Eqn. (4)', Quantitatively, VGMFs are synchronization of Concentration (C), Peace (P) & Disorderliness (D). i.e. <VGMF = <Sm(PC/D)>, provided (Sm) is Constant (1) Eqn.

Again, it has been proved in 49 months daily,30 minutes performance of the VGMFs within (Sm) that the observed (clockwise i.e. anticyclonic) motion of the VGMFs with its diverging flares appearance from its centre (Figure 1), attributes to the stability of VGMF-Photons, maintaining electrolytic-balance through the neurons in the cerebrum/cortex of the human brain,

associated with higher brain function viz. thoughts and action vis-à-vis Stress (S).

Correlation of (VGMFs - Sm) with Meditation (M\*) The Meditation(M\*) is the sum of the three viz. Body(B) + Mind(M) + 'Pranayam' (Breathing Exercise / Respiratory control (R).

Mathematically, < (M\*) = (B + M + R) >... (2) Eqn. say i.e.'VG: Meditation Eqn' i.e. Meditation is the synchronization of Body, Mind & Respiratory.

Next, the 'Pranayama' (Respiratory Control) is a 'Yogic'- exercise of Indian origin and performed with the 'Yoga' (addition) of the three viz. inhaling(i)+ hold(h) + exhale(e) in the ratio of (1: 2:1 minutes).

Mathematically, < R= (i)1 + (h)2 + (e)1 >...(3) Eqn. i.e 'VG: Respiratory Eqn.' By substituting the value of R from the above (3) Eqn. the (2) Eqn. may be written as:<M\*= (B+ M+ <(i)1 + (h)2 + (e)1> .. (4) Eqn. say i.e VG: Respiratory-Meditation Eqn. Or 'VG; R-M\*Eqn.'

Eqn.4. above narrates that Meditation(M\*) is performed by simultaneous control of Body(B), Mind(M)& 'Pranayama'(Respiratory) by inhaling the breath slowly in 1 minute, holding for 2 minutes by concentrating on the area between the two brows, equalizing one's inhalation and exhalation, & exhaling slowly by 1 minutes, and controlling the senses, mind and the Self and giving up Anger.

Reaction Kinetics of Sm: The discipline in the (Sm)/Meditation means positivity and getting rid-off from the 3-A's (Anxiety, Anguish & Anger. In the form of chemical reaction viz. Reaction Kinetics, < (Sm)/M\* → (I) → (P) → (H).>. (5) Eqn.say In other words, Meditation(M\*)/Soul meditation (Sm) is the summation of the three (I, P & H). Mathematically, < (Sm)/M\*= (I + P + H)>.. (6)Eqn. say.

The main difference between Soul meditation (Sm) and Meditation(M\*) is that during (Sm), the Mind(M) is in total rest without thoughts/ action(thinking); maintaining almost zero Kinetic Energy (KE=0), while during Meditation(M\*) respiratory/ breathing action (1:2;1) prevails.

Since the Soul meditation (Sm) is the genesis of the VGMFs, hence the above Chemical equation (5) & mathematical notation (6) should hold equally in case of VGMFs as a corollary. i.e.

- GMFs/(Sm)/M\*> → (I) → (P) → (H).> (7) Eqn. say &
- GMFs/(Sm)/M\* > = (I + P + H)> (8)Eqn. say

Thus, Meditation and Soul meditation (Sm)' in particular, along with the VGMFs, relieves depression, Stress, relaxes nervous system, and brings into order the Bipolar-disorder by maintaining electrolytic-balance through the neurons in the cortex of the human brain.



---

#### 4. Neuro-Chemical -Reaction Kinetics (Neuro-Kinetics)

These Eqns. (7-8) are alike chemical equations representing perhaps chemical reactions taking place in the Mind (Brain); during the Meditation(M\*)/ Soul meditation (Sm), representing neurological orders resulting due to neurological electrolyte balancing. If that's so, then question arises what the kinetics of these neuro-reactions are responsible to maintain the electrolytic balance through the neurons in the cortex of the human brain and attributes to its higher functions viz. thoughts and actions. Next, when the electrolytic balance in the brain gets disturbed and dysfunction sets in resulting neurological disorders and neurodegenerative diseases; then how the Soul meditation (Sm) vis-à-vis 'Goswami Meditational Flares'(VGMFs) may be helpful to treat these neurological ailments?

Well, from the above observations it's evident that during Soul meditation (Sm), the Mind(M) is in total rest without thoughts/ action(thinking); maintaining almost zero Kinetic Energy (KE=0), by not performing even the respiratory/breathing action (1:2;1) of inhaling, holding and exhaling of the breath of Meditation(M\*).

In other words, the GMFs divergence nature is attributed to the stability/balancing of the GMFs atmosphere/Cosmos while the Cyclonic (Anti-clockwise) circulation creates instability/ imbalance in the atmosphere, giving rise to convergence and entropy (disorderliness).

#### 5. VG: GMF-Equation Based on 'VG: GMF-Hypothesis'

After having performed the Soul meditation (Sm) for more than 49 months for 30 minutes duration, it has been authenticated by the author (Dr. Virendra Goswami) that:

VGMF should be proportional to Peace(P)> ..... (i)Eqn. say.

VGMF is proportional to Quality (Q) of (Sm)> (ii)Eqn. say.

VGMF is proportional to duration of Time (T) of (Sm)> (iii) Eqn. say.

VGMF is proportional to clean Environment(E)> ..... (iv)Eqn. say.

VGMF proportional Concentration (C) of Sm.>..... (v)Eqn. say.

VGMF proportional to frictional Heat(H) >..... (vi)Eqn. say.

Summing up Eqn. (i) to Eqn.(vi), we get,  $VGMF = Sm (PQTECH)$ > (9) Eqn. say, where (Sm) is Constant.

#### 6. Correlation of VGMF VGMFs& Entropy (Disorderliness)

Another aspect of the VGMFs, is that the stress-free brain is needed for the VGMFs creation during the (Sm). In other words, <VGMF is inversely proportional to Stress> Since <Stress is inversely proportional to Peace> & <Peace(P) is inversely proportional to Entropy (En) or Disorderliness(D)>, Then, 'VGMF-Equation'

reduces,  $\langle Sm (PQTECH H/En) \rangle \dots$  Eqn. say .

Or  $\langle VGMF = \langle Sm(PQTECH/D) \rangle \dots (10)$  Eqn. i .e VG: 'GMF-Entropy'. Eqn.

#### 7. Where (Sm) is Constant

##### 7.1 Correlation of VGMFs with Neurodegenerative Diseases.

Since GMFs are related to Intraocular Pressure (IOP) & may prove a remedy to neurodegenerative diseases e. g. Glaucoma. The IOP is an ocular eye pressure, measured in millimetres of mercury (mm Hg). Normal IOP ranges from 12-22 mm Hg. IOP greater than 22 mm Hg is associated with neurodegenerative diseases, caused by a brain tumour, stroke, glaucoma, diabetes, hypertension, or head trauma.

Again, it has been observed that the number of VGMFs are inversely proportional to IOP.

Or  $\langle VGMF = Sm(1/IOP) \rangle (11)$  Eqn. Say, where, (Sm) is constant.

It means, patients in number VGMFs would result in a reduction in the IOP vis-à-vis relief to the patients suffering with neurodegenerative diseases.

These VGMF-CID may enable us to find the correlation of VGMF-Velocity with the blood velocity to visualize the changes in orbital hemodynamics associated with a variety of pathological conditions, including central retinal artery and vein occlusions, cranial arteritis, nonarthritic ischemic optic neuropathy, and carotid disease and suggest the remedial action to the said diseases related to 'Neuro- Ophthalmic-Disorders'. Also, to detect the vascularization of orbital and ocular tumors as well as to investigate altered hemodynamic associated with neurodegenerative diseases affecting the functioning of neurons or the entire neurological pathway.

This causes dysfunction of the Central Nervous System (CNS) and Peripheral Nervous System (PNS) of the human brain. These are of two kinds neurological disorders mainly responsible for Common Neurological Diseases e.g. Alzheimer, Back pain, congenital defects of the brain ,spinal cord, Cerebral palsy, Chronic fatigue syndrome ,Concussion, Headaches and migraines and Hyponatremia (Central Nervous System Disorders with disturbed serum sodium level less than 135 mEq/L) I think, the Soul meditation (Sm) vis-a-vis VGMFs may prove a remedial measure to Neurological Disorders (resulting due to imbalance of chemical electrolytes in the brain )viz Migraine, Chronic severe headache, Bipolar Disorders (particularly during its lower phase), as (Sm) vis-a-vis VGMFs facilitate the balancing of the chemical electrolytes in the brain due to its clockwise i.e. anticyclonic) motion of the VGMFs , attributing to its diverging flares appearance from its Centre resulting to the balancing of the electrolytes in the neurological sphere(brain).

Also, the above studies have shown that the VGMFs originated during the Soul meditation (Sm) are inversely proportional to

---

the Stress(S) and Entropy (Disorderliness) with the mere fact that during the Soul meditation (Sm) the mind is in rest without thoughts and thinking action with almost nil kinetic energy, inhibiting the increase in blood velocity(neurons) in the blood vessels of the brain.

This has been observed by the author himself during the last 49 months practice of the Soul meditation (Sm) and getting rid-off from the 64 years of the headache/migraine misery as well as the other neurological abnormalities.

## 8. Introduction to Neurological and Neurodegenerative Disorders

The word 'Neurodegenerative' is the combination of the prefix "neuro-," which designates nerve cells (i.e., neurons), and "degenerate," refers to, in the case of tissues or organs, a process of losing structure or function. Thus, neurodegeneration symbolizes any pathological condition primarily affecting neurons. The Neurological disorder emulates for unknown reasons and progresses in a relentless manner.

Neurodegeneration occurs in the Central nervous system (CNS) through the loss of neuronal structure and function is very common in Senior Citizens. For example, Alzheimer's Disease (AD), multiple sclerosis, Parkinson's Disease (PD) and amyotrophic lateral sclerosis that negatively affect mental and physical functioning.

## 9. The Common Neurological Disorders

Amyotrophic lateral sclerosis (ALS): Alzheimer's disease, Aneurysm: Back pain, Bell's palsy, Birth defects of the brain and spinal cord, and Brain injury.

Brain Tumour: Cerebral palsy, Chronic fatigue syndrome & Concussion.

- Dementia: Disk disease of neck and lower back, and Dizziness, Epilepsy: Guillain-Barré syndrome,
- Headaches and migraines, # Multiple sclerosis.
- Muscular dystrophy.
- Neuralgia, Neuropathy, Neuromuscular and related diseases.
- Parkinson's disease: Psychiatric conditions (severe depression, obsessive- compulsive disorder),
- Scoliosis & Seizures: Spinal cord injury :Spinal deformity and disorders Spine tumour ,Stroke & Vertigo.

The symptoms of these Neurological Abnormalities are paralysis, muscle weakness, poor coordination, loss of sensation, seizures, confusion, pain and altered levels of consciousness caused by genetic (congenital) disorders, infections, environmental pollution, malnutrition, and brain injury etc. These said abnormalities can be diagnosed by neurological examination and are treated with neurology specialties by the Neurologists. While psychiatric illnesses" like Mental disorders (distress or impairment), appearing due to abnormalities of thought and behaviour need the treatment of clinical neuropsychology specialists by the Neuropsychologists.

## 10. Mechanism of Neurological and Neurodegenerative Disorders

Well, it reminds me of the famous quote that "Necessity is the mother of Invention". The first genetic discovery in glaucoma, multicentre clinical trial, and defining glaucoma as a neurodegenerative disease was innovated at the Glaucoma Research Foundation by Dr Thomas Brunner et.al and later developed by Dr. Virendra Goswami, acronym 'Soul meditational (Sm) Flare Therapy'(SmFT) as well as experimented on himself being a patient of Open Angle Glaucoma, migraine headache, Sjogren Syndrome, and Spinel Stenosis for more than48 months to innovate non-invasive, affordable meditational techniques to Control Ophthalmological(Glaucoma), Neurological and Neurodegenerative ailments.

The Neurological Disorders are related to bodies nervous system, affecting the brain, spinal cord, and nerves in the body causing structural, biochemical or electrical abnormalities, like Brain Tumour, Dementia, Epilepsy, migraines, Parkinson's disease, Seizures:, Stroke & Vertigo etc.

Neurological Disorders affect either a single neuron or the entire neurological pathway, causing dysfunction, viz. Central Nervous System (CNS) and Peripheral Nervous System (PNS) disorders, or the cortex is the largest part of the human brain, associated with higher brain functions. The Figure 3, below depicts the human brain showing the four lobes frontal lobe, parietal lobe, occipital lobe, and temporal lobe - of the cerebral cortex. The cerebrum or cortex is the largest part of the human brain, associated with higher brain functions such as thought and action. (C.f. Disabled World, Rev.2020,04,01,015. 04.08).

Recently identified the inflammatory process as being closely linked with multiple neurodegenerative pathways, which are associated with depression, a consequence of eurodegenerative disease. The pro-inflammatory cytokines are important in the pathophysiology of depression and dementia, confirming that the role of neuroinflammation in neurodegeneration is important since pro-inflammatory agents, which are the causative effects of neuroinflammation, occur widely, particularly in the elderly in whom inflammatory mechanisms are linked to the pathogenesis of functional and mental impairments [7].

Neurodegeneration by viruses refers to the interaction between the CNS and environmental viral factors. The presence of immune activation in the CNS results in viral infections, immune-mediated disorders, and neurodegenerative diseases, involving microglia and astrocytes constituting the resident immune cells of the CNS and important in the regulation of homeostasis of the brain during development, adulthood and aging. However, inflammation in tissue pathology that may result in the production of neurotoxic factors amplifying the disease states, indicates the persistence of inflammatory stimuli or failure in normal resolution mechanisms. neurodegenerative diseases including AD, MS, PD and ALS, are linked to intracellular mechanisms e.g. the degradation of protein, the dysfunction of mitochondria, the defects of axonal transport

and apoptosis.

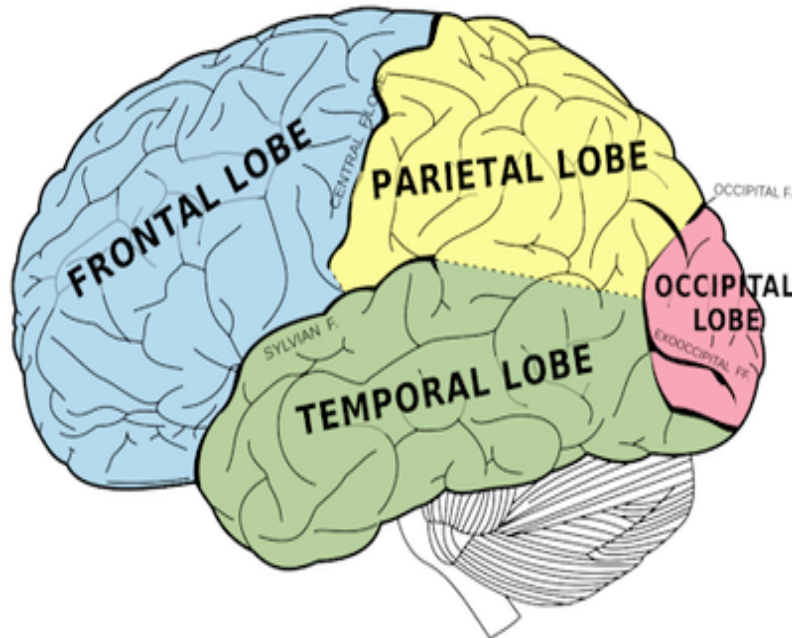
Therefore, the spectrum Neurons are post-mitotic cells, Brain, is one of the major avenue of the geriatric problems, indicating brain aging, wherein the spectrum of memory and cognitive loss that occurs from normal aging to mild cognitive impairment, and then finally to AD. Oxidative stress, mitochondria dysfunction, and apoptosis are involved in basic molecular and biological process leading to neuronal cell death, i.e. of aging brain.

Next, J. Emeriti et.al.( Biomedicine & Pharmacotherapy, Volume 58, Issue 1, January 2004, Pages 39-46) have explained that ROS

and RNS are the cause of oxidative stress in nervous system. Classically oxidative stress is described as an imbalance between generation and elimination of ROS and RNS.

Oxidative stress is accountable for redox regulation involving Reactive Oxygen Species (ROS) and Reactive Nitrogen Species (RNS). It modulates the critical cellular functions, notably for neurons astrocytes and microglia, apoptosis program activation, and ion transport, calcium mobilization, involved in excitotoxicity.

Excitotoxicity and apoptosis are the two main causes of neuronal death.



**Figure 3: Diagram of the Human Brain Showing the Four Lobes - Frontal Lobe, Parietal Lobe, Occipital Lobe, and Temporal Lobe - of the Cerebral Cortex**

The adult brain contains about 1011–1012 neurons, which are supported and protected by at least twice as many neuroglial cells. Recently, it has been suggested that glial cells, especially astrocytes, play more sophisticated neuron like roles. Glial cells only provide structural support to assist the metabolism of and help protect neurons. The endothelium of the small blood vessels in the brain is much less permeable to molecules than other vascular endothelia, although essential molecules such as glucose, and most lipid soluble molecules can still penetrate the central nervous system (CNS), especially sensitive to oxidative stress, because of high O<sub>2</sub> consumption: in humans. The brain accounts for only a few percent of the body weight but it processes 20% of basal O<sub>2</sub> consumption while a neuron uses much of O<sub>2</sub> it takes up to make, via mitochondria, ATP needed to maintain low gradients (high intracellular K<sup>+</sup>, low Na<sup>+</sup>, very low and “free” Ca<sup>+</sup>). The brain uses glucose for energy production and needs about 4 × 10<sup>21</sup> molecules every minute. As the mitochondria in aerobes, are the fount of ATP synthesis, the deep hypoglycemia and inhibitors of ATP synthesis e.g. rotenone or cyanide can cause neuronal cell death. @. Correlation of Neurodegenerative Disorders with

Oxygen volume while performing ‘VGMF-Neuro Therapy.’

Dr. Virendra Goswami (2022): These above findings of J. Emerit et.al. motivated the present author Dr. Virendra Goswami to study not the Correlation of Neurodegenerative Disorders with Oxygen volume while performing ‘VGMF-Neuro Therapy’, and VG SmFT’ for Glaucoma but, also ‘VGMF-Corona-Therapy’ after having recovered from Corona Virus (COVID-19) after 7 days hospitalization and successive treatment and care along with his spouse (Mrs. Shashi Goswami), who did suffer with Corona, had hospitalization more than a week followed by 3 weeks oxygen inhalation at home for the full recovery.

Hence, the results of studied Correlation of Optic-nerve-compression (ONC) with Meditational Flares (MFs) during ½ hour Soul meditation (Sm), by measuring the Oxygen volume before the (Sm), and after( ½ h)(Sm), by using Oxy-Pulse Meter (OP-Meter) every day for more than 60 Days, and recorded the increase in oxygen volumes by 1.0 cc in case of (½)h. Sm and by 2.0 cc in (1h)Sm. The increase in O<sub>2</sub> Volume did reduce the

intensity, and duration of headache as well as the frequency of migraine attacks; reconfirming that inadequate oxygen flow into neurons (Brain cells) is the probable cause of headache and thus established that the ‘SmFT’ is also a non-invasive, most

economical and with nil side effects ‘Corona-Therapy’ apart from being a remedy for Ophthalmological and Neurological Disorders. For Example, there are few observations experimented on me are cited below (Table-1):

Pulse	T+30min	OxyVol	Pulse	T+60min	OxyVol	Pulse
• 20Nov’21	96	52	97	52	98	52
• 21 Nov’21	96	55	96	55	98	55
• 22 Noiv’21	95	67	96	67	98	67

During the 60 days, after the performance of the Soul meditation (Sm) in the defined posture by Dr. Virendra Goswami (VG), and measuring with the same Oxy-Pulse Meter (OP-Meter), every time to avoid any calibration error, it was observed that there was an increase in Oxygen volume by one unit with no change in pulse rate and increase of Oxygen Volume by 2 units in one hour Sm, inferring that (Sm) and (VGMFs) can be used as treatment to Corona Virus.

To authenticate the above facts of increase in Oxygen-Volume, more clinical investigations on the different types of patients of neurological and neurodegenerative ailments and the healthy (non-Patients) of the said diseases are needed.

General Methodology and Procedure to be followed During Clinical Trial on Patients: Conceptual study: A detailed review of selected drugs (Allopathic) and soul-soul meditation was done.

Procured drug: The drug was procured from a reliable source. Authentication: Authentication of the raw drug was done. Therapeutic intervention: Patients were advised to continue allopathic treatment which they used to previously take for the Neurological and Neurodegenerative disorders along with present trial drug and meditation as adjuvant therapy. Sample Size: Sample size was limited to 20 in each group.

## 11. Criteria for Selection

### 11.1 Inclusion

- Patients aged between (15-45) & (45-85) years with Neurological and Neurodegenerative disease.
- Exclusion.
- Patients aged between (45-85) years, having multiple Neurological and Neurodegenerative diseases together.

## 12. Method of Data Collection

The data of the selected patients (those who comply with the inclusion criteria) was collected. The selected patients underwent the series of events before the treatment which include informed consent on the study, their demographic details, a detailed history that was supported by the related clinical and pathological reports by filling up the Clinical Report Form (CRF) as per the requirements of the study.

## 13. Criteria for Diagnosis

### 13.1 Subjective Parameters

- Feeling of fullness or heaviness in eyes, neck, and Head and forehead
- Heaviness & numbness
- Visual and comprehensive/apprehensive disturbances.
- Mild to Severe headache with throbbing pain.
- Vision and Memory loss.

### 13.2 Objective Parameters

- IOP using Applanation Tonometry / Schiötz.
- Direct and indirect Neurological examinations. Fundus Photography for Optic nerve head (ONH) evaluation.
- Neurological Colour Doppler (Carotid) and Radiological tests.
- MRI -Brain, MRI-Spine etc.
- Nerve compression test.
- Haematological Investigations like CBC, KFT, LFT etc.
- Holter Monitor.

## 14. Criteria for Groups & Duration of Study/Treatment

GROUPS -: The selected patients were randomly divided into three groups on the basis of computer-generated random number chart.

GROUPS A: Standard Allopathic treatment to along with once daily Soul meditation

GROUPS B: Application of the prescribed Allopathic medicine + Soul meditation

GROUPS -C: Soul meditation on healthy volunteers – 20

DURATION OF STUDY – Initial 42 Days period was selected as it’s after 42 Days (6 Weeks) performance of Soul meditation (Sm), 30 minutes every day in the defined Posture, the Meditational Flares (MFs) are observed.

DURATION OF TREATMENT: \*Assessment on – 1<sup>st</sup> day, 15<sup>th</sup> day, 30<sup>th</sup> day, 42 day Follow up – after 15 Days\* Total duration of trial – 8 Weeks

INVESTIGATION, RESEARCH PERFORMA, RESCUE MEDICATION & ADR (Adverse Drug Reaction) INVESTIGATION: Routine Hb%, Fasting Blood sugar (FBS) and Lipid profile.

RESEARCH PERFORMA: A detailed research Performa will be prepared incorporating all the points from the innovative Soul



---

meditational Flares Therapy (SmFT) as well as modern aspect (Allopathic) to study the patients as well as the disease.

### 15. Rescue Medication And ADR

To alleviate any emergency, the use of rescue medication will be permitted as per the need of the patient, disease condition, and discretion of the investigator. If there is any occasion of Adverse Drug Reaction (ADR), additional pharmacological drugs will be prescribed in consultation with contemporary medical practitioners, or other Allopathic will be administered in consultation with the experts in the field.

The data on these occasions with the kind and doses of the additional drugs will be noted, recorded, analysed and reported.

Parameters for Assessment of Study Outcomes For the assessment of the effect of the therapy the following criteria was used and shall be used in future for further investigations.

- a) Improvement in the signs and symptoms of the Disease.
- b) The required investigations were conducted and will be conducted before and after the treatment of the patient in future as well.

#### 15.1 Primary end Point

Change in Clinical features of Neurological and neurodegenerative diseases.

#### 15.2 Secondary end Point

Improvement in quality of life related to the Neurological and neurodegenerative Brain's cell, and Ocular health.

### 16. Statistical Methods of Analysis

The data from clinical study were assess related; would be assessed in future as well, by other representative diagnostic tests recommended for Neurological and neurodegenerative diseases for objective parameter & the tests for subjective parameter will be presented in the form of dissertations.

### 17. Results

The IOP uses Tonometry, Direct and indirect Neurological examinations, Fundus Photography for Optic nerve head (ONH) evaluation. Neurological Colour Doppler (Carotid) /Ultrasound, Holter Monitor, MRI -Brain, and MRI-Spine etc. Conducted before the Sm and after 2 years of Sm , showed very significant improvements. The SCOPE: Since the Eye-Field Test is used by the ophthalmologist to detect areas of vision loss (blind spots) caused by Neurological Disorders( e.g. brain tumor, stroke, hypertension, or head trauma ),glaucoma, diabetes, as well as to determine the severity of, and monitor the glaucoma hence, I think, the Soul meditation (Sm) vis-à-vis VGMFs may prove a remedial measure as 'VGMFs-Therapy' to the Ophthalmological Disorders as well as the Neurological Disorders ,resulting due to imbalance of chemical electrolytes in the brain viz Migraine/Chronic severe headache, Bipolar Disorders (particularly, during its lower phase). Next, Soul meditation (Sm) vis-a-vis VGMFs facilitate the balancing of the chemical electrolytes in the brain due to its observed clockwise

i.e. anticyclonic) motion of the GMFs attributing to its diverging flares appearance from its centre resulting to the balancing of the electrolytes in the neurological sphere(brain) as observed by Dr. Virendra Goswami during the (Sm).

### 18. Potential Commercial Application of the (SMFT) & 'VGMF-Neuro- Therapy'

Though there is hardly any explicit commercial application of the innovative 'Soul Meditational Flare Therapy (SmFT) & 'VGMF-Neuro Therapy', are aimed to make these therapies more effective, nil side-effects, non-invasive, most economical and affordable Therapy acronym '(SmFT)' & 'VGMF-Neuro Therapy' for all types of the patients (rich and the poor in particular), suffering with Ophthalmological, Neurological, Sjogren Syndrome (autoimmune) Disorders and even probably COVID- 19(Corona).

Implicitly, also, it's not having considerable commercial potential as the innovative 'SmFT' & 'VGMF-Neuro Therapy' do not repetitive costly aforesaid allopathic diagnostic tests after getting authenticated the occurrence of the said Ophthalmological, Neurological, and auto-immune disorders.

However, in future on the invention and authentication of the proposed and based on Trabeculoplasty (tra-beck-you-low-plas-tee) i.e LASER –Treatment, if an innovative technology by the Inventor of the said (SmFT), acronym 'Soul- meditational Flares Amplification Stimulated Emitted Radiation ('Sm-FASER')-Therapy comes up with the design of 'Sm-FASER' Laser- Gun; followed by clinical tests on good number of patients, then obviously, this patent of the 'SmFT' & 'VGMF-Neuro Therapy' 'would like to have a great commercial potential.

Again, this is not the result as more technology/ techniques of non-conventional, conventional & hybrid technology (conventional +non-conventional) would be developed with hybrid team (Scientists, Neurologists and Ophthalmologist Goswami VK: Prediction of Neurological and Neurodegenerative Disorders.

VGSmF appearance after 48Months or so-Prediction of Neurological and Neurodegenerative Disorders (Please refer -Virendra Kumar Goswami <vk\_goswami1@rediffmail.com> on Wed, 20 Mar 2024 06:50:11)

This change in appearance in the VGMF during the 1/2 hour Sm vis-a-vis change in the Morphological (fading and hazy) and Dynamical Properties (reducing to almost nil the movement (cyclic/ anticycling); maybe use as a VG-'Diagnostic-Index' (VGMF- ID) and VGMF-'Remedial-Index' (VGMF-IR)of the Neurological and Neurodegenerative Disorders.

In other words, if the appearance of the VGMF-Pattern is observed during the Sm (preferably after having formed Sm for 1-3 months), in the Healthy Person then it may be an indication (Ban) of setting up the Neurological/Neurodegenerative Disorders. Reversely, if this is observed during the Sm after having performed the Sm and observing the VGMF for 48 months or so, in case of established

---

patient of these Neurological/ Neurodegenerative patients then it's an Remedial indication (Boon) of the Neurological and Neurodegenerative Disorders. In simple terminology it may be acronym as 'VG-BAN' & 'VG-BOON' as the 'VG-ID' & 'VG-RI' respectively [1-7].

Though it's difficult at present to forecast the period of setting -up and getting healed- up of the Neurological and Neurodegenerative Disorders in case of Healthy and the Patient of these NDs (Neurological /Neurodegenerative Disorders), respectively as it needs more and more clinical investigations and Innovations by the present and future generations for the sake of the humanity in totality.

### References

1. Strassman, R., Wojtowicz, S., Luna, L. E., & Frecska, E. (2008). *Inner paths to outer space: Journeys to alien worlds through psychedelics and other spiritual technologies*. Simon and Schuster.
2. Goswami VK <An Innovative 'Virendra Goswami Soul Meditational Therapy'(VG- Sm FT)' for Remediation of Ophthalmological & Neurodegenerative diseases.
3. Patent /Copy Right # I-131230/2023, Dated 31.07.2023, Office, Intellectual Property Rights (IPR), Government of India.
4. Siesky, B., & Harris, A. (2011). *The importance of ocular blood flow in OAG: decreased ocular blood is a likely contributor to glaucoma development. But, a thorough assessment of blood flow rates may help facilitate a faster diagnosis. Review of Optometry, 148(10), 108-117.*
5. *Gamma-ray bursts (c.f. Space-facts.com, 18 Jan '20), Google search.*
6. Kim, D. K., & Joo, K. W. (2009). *Hyponatremia in patients with neurologic disorders. Electrolytes & Blood Pressure: E & BP, 7(2), 51-57.*
7. Chen, W. W., Zhang, X. I. A., & Huang, W. J. (2016). *Role of neuroinflammation in neurodegenerative diseases. Molecular medicine reports, 13(4), 3391-3396.*

**Copyright:** ©2025 Virendra Goswami. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.