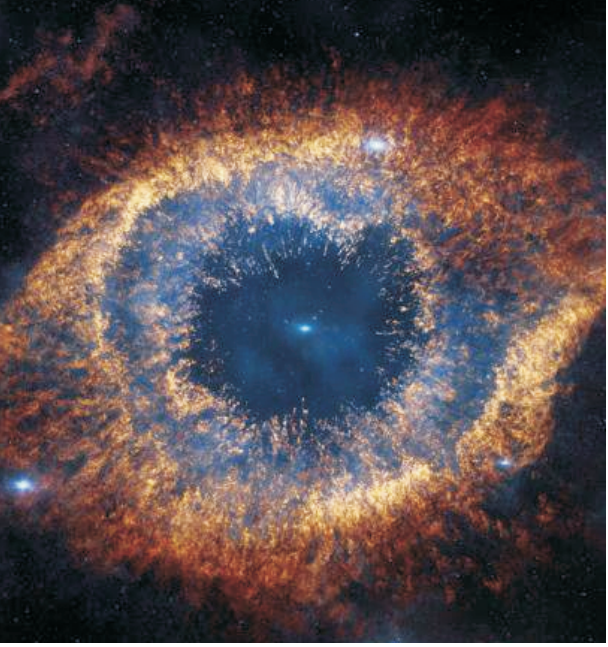

The Creation of the Universe – A Biological View

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The Human Brain and Evolution, Extinction and Reproduction of Universe - Archaeal and RNA Viroidal Cloud in the Interstellar Space and Human Evolution

Introduction

The interstellar space is filled with star dust which is postulated to be of biological origin. Fred Hoyle in his hypothesis of the life cloud has put forward an extraterrestrial origin for life on earth. The existence of an extraterrestrial force controlling the genesis and evolution of life on earth has been put forward by many authors. The biocosm theory postulates that the conditions in the universe have been so adjusted to make it possible for life to exist on earth and the universe. This leads to the postulate that the universe exists and reproduces because of life which acts as a quantal observer. This paper deals with the role of extremophilic archaea and RNA viroids extruded from the archaeal cells as primitive anthropomorphic observers making it possible for the universe to exists and evolve. The human race is divided into two species homo sapiens and homo neanderthalis. The homo neanderthalis interbred with homo sapiens to produce a hybrid species. Therefore there are species with more of neanderthalic origin and homo sapien species in earth. The previous studies have demonstrated matrilineal societies with more of neandethalic origin in contrast to patrilineal societies. The origin of neanderthalic societies and homo sapien communities was ascribed to symbiosis. The neanderthal species has more of extremophilic archaeal symbiosis occurring in the extremes of climate like the ice age and global warming. The homo sapien species has more of intragenomic RNA viroid/retroviral symbiosis which contribute to the dynamicity of the homo sapien genome. The Neanderthal species were retroviral resistant. The origin of the archaea and the RNA viroids are possibly from the interstellar space as archaeal clouds and RNA viroidal quantal computing clouds which function as extra terrestial intelligence. The RNA viroids are extruded by archaeal cells. They would have reached the earth via

meteoroidal impacts and seeded life on earth. The archaeal colonies would have organized into the homo neanderthalic species in Eurasia and RNA viroidal colonies would have led to the evolution of homo sapien species in Africa. [1-16] The paper deals with this hypothesis.

Materials and Methods / Results

The blood samples were drawn from the homo neanderthalic matrilineal species and the homo sapien species. The estimations done in the blood samples collected include cytochrome F420 activity. The generation of RNA viroids in the plasma was studied. The results showed that the matrilineal species of neanderthalic origin had more of archaeal symbiosis while the homo sapien species had more of RNA viroidal symbiosis.

Table 1. *Cytochrome F420 activity.*

		Sudra	Non-sudra	F value	P value
CYT F420 % (Increase with Cerium)	Mean	23.46	4.48	306.749	< 0.001
	±SD	1.87	0.15		
RNA % change (Increase with Rutile)	Mean	4.37	23.59	427.828	< 0.001
	±SD	0.13	1.83		
RNA % change (Decrease with Doxy)	Mean	18.38	65.69	654.453	< 0.001
	±SD	0.48	3.94		

Discussion

The quantal wave form or the Higgs field gives mass and energy to the particles like protons, neutrons and electrons when it interacts with it. The quantal wave forms can generate porphyrins. Porphyrins can have a macromolecular and wave existence which is interconvertible. The porphyrin arrays can self organize and self reproduce. The macromolecular porphyrin

arrays would have functioned as intelligent organisms in the interstellar space. The iron porphyrins can undergo photooxidation and generate a magnetic field. The photonic interaction with the magnetic porphyrins can generate black holes which can collapse to a point before singular density. At this point of time it can undergo rebounce producing new universes. The porphyrin organism with its quantal computing function served as the initial anthropomorphic observer or the lotus of Brahma. The porphyrins would have formed a template for RNA viroids and prions to form. This would have generated primitive archaeal forms. The primitive archaeal cell can extrude RNA viroids generating RNA viroidal clouds. The intergalactic magnetic field generated by the archaea and magnetic porphyrin organism would have contributed to the evolution of star systems and galaxies. The archaeal clouds and RNA viroidal clouds would have served as interstellar intelligence guiding the formation of star systems and galaxies and also functioning as anthropomorphic observers. The meteoritic impacts would have transferred the archaeal and RNA viroidal colonies to earth. They would have self organized into plant and animal species as well as homo sapien and homo neanderthalic species. The homo neanderthalic species are archaeal dominant. The homo sapien species are RNA viroidal dominant.[1-16]

The big bang cosmology postulates the evolution of the universe from the Higgs field. Higgs field is made up of Higgs Boson and top quarks. Higgs Boson can exists in two states. The stable state which is of high energy, low density compatible with the present existence of universe and the unstable state which is of low energy and high density. The universe is presently in the edge of the stable state. The low energy high density state is unstable and can cause catastrophic vacuum expansion leading to the end of the universe. The Frohlich model of quantal brain function postulates the existence of Bose-Einstein condensates in the brain at normal temperature. There are dipolar magnetite and porphyrin molecules in the brain which in the context of membrane sodium

potassium ATPase inhibition can lead onto a pumped phonon system producing Bose-Einstein condensate and bosons in the brain. This boson can become unstable leading onto catastrophic vacuum collapse and the possible extinction of the universe. The Frohlich model of Bose-Einstein condensate formed of magnetic dipolar porphyrins and archaeal magnetite in cellular lipid emulsions can interact with photons generating black holes. This black hole can collapse to singularity. But the collapse happens only upto a particular point following which the density or singularity undergoes a rebounce producing a new universe with a new set of universal constants. Thus the quantal model of brain function can lead onto the destruction and reproduction of universes. The brain can be considered to be a multicellular quantal computing archaeal network in the case of homo neanderthalis. The synaptic networks of the brain parallel the galactic networks of the universe. The brain functions as the universal quantal computer and anthropomorphic observer creating and destroying as well as reproducing universes. This occurs to a lesser extent in the homo sapien brain.[1-16]

The homo neanderthalis species would tally with the biblical fallen angels and the homo sapien species representing the God angel. They are basically visitations of extraterrestrial intelligence as archaeal and RNA viroidal colonies. The homo neanderthalis is a evolved archaeal colony network. The archaea extrudes RNA viroids. The homo sapien species is RNA viroidal dominant with RNA viroids integrated into the genomic DNA. The organization of race and caste system in India points to such an origin. The homo neanderthalic species had an initial habitation in the Indian ocean continent which had a catastrophic extinction by archaeal expansion in the ocean crust which generated dangerous tsunamis during ice age. The Neanderthals migrated to the Eurasian landmass creating the civilization of Harappa, Sumeria and Egypt. They are the asuras of Rig veda. The homo neanderthalic species are fair, matrilineal, asexual, spiritual, altruistic and community organized. These civilizations were basically matrilineal and creative.

They were paganistic, secular and atheistic. They were environmentally conscious living in quantal interaction with the world around creating a feeling of environmental spiritual consciousness. The society formed on this basis functioned as an organic whole in quantal interaction with one another. It was equal, just and functioned as primitive form of socialistic society. The homo neanderthalis species was essentially asexual with the gender equality and matrilinearity. The archaeal overgrowth consequent to global warming can lead to eventual neanderthalisation of the human species and brain. The brain neuronal cortex shrinks due to quantal perception of electromagnetic fields which pollute the globalized warm world. There is also consequent cerebellar hypertrophy. Cerebellar hypertrophy can lead onto schizophrenia and autistic modes of behavior. Cerebellar hypertrophy can lead to cerebellar dysfunction and motor ataxia. The motor ataxia and the clumsiness of movement and speech would have lead to the evolution of abstract painting, dance, music, symbolic speech and eventually speech in the Neanderthals. The neanderthalisation of the human brain consequent to global warming leads to evolution of rock music, dance and modern forms of abstract painting. The Neanderthal brain owing to magnetite mediated increased quantal perception are more spiritual. The Neanderthal community owing to quantal perception functions as one single whole leading to altruism, spirituality, socialism, gender equality and ecospirituality. This represents the civilisational mode of the eastern world. The societies emerged from the possible Lemurian landmass. As they evolved out of extraterrestrial archaeal colonies and intelligence their level of development and intelligence was high. They possessed the original language and the concept of a human Godhead was developed first in their civilization. The Rig veda is the oldest spiritual book of humankind. Most of the Gods described in Rig veda were of asuric origin even Varuna, the principal God. The major philosophical entities of Buddhism and Jainism which are basically atheistic religions preaching social equality, oneness

and justice were evolved by the asuras. The homo sapiens evolved in Africa and migrated to the Eurasian landmass. They had basically an RNA viroidal symbiosis in the brain which gave rise to a practical less creative brain. The homo sapien species are patrilineal, commonsensical and individualistic. The homo sapien community forms the devas of the vedic literature and the Rig veda describes clashes and wars between the asuric inhabitants of Harappa and the invading devas. They over ran the neanderthalic civilisations and created a racial society with the homo sapiens as the ruling class and the Neanderthals as the under caste of sudras. The sudras formed the discriminated underbelly of the civilisation. The literature, language and holy books of the asuras were taken over by the uncivilised homo sapienic devas who made it into their own. The future generations of sudras were prevented from learning their language and worshiping their Gods which were taken over by the homo sapienic devas. The homo sapienic devas were theistic, individualistic, unaltruistic and had no communal or societal consciousness. This signifies the civilisational mode of the western world. The archaeal growth in homo sapiens is less. This leads onto less of magnetite mediated quantal perception and universal oneness. This contributes to the individuality, selfishness, unaltruistic behavior, unbridled capitalism and the patriarchal gender unequal society of the homo sapien world.[1-16]

The homo neanderthalic society owing to increased quantal perception is spiritual and feels the oneness of the world and the godliness of individual human beings. This leads onto the philosophy of Buddhism with its sense of atheism and human values. Buddhism and Jainism as well as the Mauryan empire represents victory for the asuric Neanderthals or the sudras. The Buddhist and Hindu society of neanderthalic world considered good and evil as part of the same quantal world representing the universal soul. The godhead and the fallen angel belong to the same quantal world of the universal soul. The concept of right and wrong are not absolute contraindications but part of the

same quantal world. The quantal perception produces information storage after mortality and the idea of reincarnation. The increased world of quantal perception mediated oneness and the cholesterol catabolizing archaeal overgrowth leading to sex hormone deficiency produces the gender equal asexual world. Sexuality is not considered as something apart from religion as evidenced by the tantric schools of Hinduism and Buddhism. It was considered as a form of experiencing oneness as indicated by ideas such as Kundalini. The increased quantal perception leads to a feeling of oneness which produces universal unity. There is no war but universal peace. Eastern societies like China and India are basically quantal docile societies with war being uncommon. The major wars in Hindu history like the Mahabharata and Ramayana war were those between the colonizing homo sapien devas and the native peaceful Neanderthals. The Pandava army were the homo sapien devas and the Kaurava army the neanderthalic natives. The God Rama was the head of homo sapien devas and the Ravana the leader of the native Neanderthals. The devas were the head of the colonizing homo sapiens from Europe. They could win the Mahabharata and Ramayana wars and the sudric neanderthalic native population was rendered to slavery for generation to come. The independence struggle and Gandhi's attitude to the lower caste and harijans were a part of the same phenomena. The homo sapien world on the other hand due to reduced quantal perception was individualistic. Good and evil were absolutely different as the God and the fallen angel. There was no belief in reincarnation and sexuality was considered as taboo. The homo sapien society owing to its reduced quantal perception and individualistic nature discovered wars and slavery. Wars are essentially a feature of semitic societies and religion. The homo sapien devas are capitalistic and rightist in their attitude to society while the homo neanderthalis is communistic and socialistic. The war between capitalism and socialism is representative of that between Neanderthals and

homo sapiens. The phenomena of global warming, archaeal overgrowth and neanderthalisation of homo sapiens will lead to a more peaceful, globalised, spiritual, gender equal and altruistic society. But the Neanderthal domination resulting from global warming can lead to the society's own demise.[1-16]

The phenomena of climate change and global warming leads onto archaeal multiplication and neanderthalisation of the human race. Archaeal growth occurs in extremes of climate - the ice age and in times of global warming. This results in a return to asuric culture and civilization with its spiritual, environmentally conscious, socialistic, asexual and group identity. The modern world is represented by the Kali yuga where the sudras or the Neanderthals return to a position of power and global significance. This represents the rise of the asuric neanderthalic sudric slaves. This is represented by the rise of neanderthalic eastern societies of China and India as well as the decline of the homo sapien West and Africa. The neanderthalisation of homo sapiens due to archaeal growth can lead to human disease and eventual extinction. The archaea catabolizes cholesterol to generate digoxin. Digoxin functions as the neanderthalic hormone. Digoxin produces membrane sodium potassium ATPase inhibition and increased intracellular calcium and reduced magnesium. Magnesium deficiency leads to mitochondrial dysfunction, vasospasm, dyslipidemia and metabolic syndrome x. The increase in intracellular calcium leads to oncogene activation and malignancies. The increase in intracellular calcium can activate NFKB leading to immune activation and autoimmune disease. The increased intracellular calcium can activate the caspase cascade leading onto cell death and degenerations. The increase in intracellular calcium can increase synaptic release of monoamine neurotransmitters producing schizophrenia and autism. The increase in archaeal growth can produce the Warburg phenotype with increased glycolysis and mitochondrial dysfunction. The increased glycolysis can activate the lymphocyte producing autoimmune

disease as lymphocytes are dependent on glycolysis for energy needs. The cancer cells also depend on glycolysis for energy needs. The Warburg phenotype can lead onto increase in malignancies. The Warburg phenotype and increased glycolysis can lead to poly ribosylated glyceraldehyde 3 phosphate dehydrogenase mediated cell death and degeneration. The Warburg phenotype can lead to magnesium deficiency related insulin resistance and mitochondrial dysfunction leading to schizophrenia. Thus archaeal mediated hyperdigoxinemia and Warburg phenotype can lead to civilisational diseases in the Neanderthal phenotype leading onto its extinction. The archaeal overgrowth in the ocean crust owing to global warming can lead to release of large amounts of methane producing oceanic earthquakes, tsunamis and destruction and splitting up of continents. This leads onto the catastrophic end of the world. As also the archaeal porphyrin and magnetite mediated Frohlich model of Bose-Einstein condensates in the brain generated bosons can undergo catastrophic vacuum decay leading to universal extinction. The magnetic dipolar porphyrins and magnetite in the lipid emulsion of brain cells can be photonically excited generating black holes. These black holes don't reach absolute singularity, but near that point can undergo a phenomenon called rebounce reproducing the universe. Thus the neanderthalisation of human brain and generation of Bose-Einstein condensate of the Frohlich model can lead to extinction and reproduction of the universe.[1-16]

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2

The Porphyrions, Origin of Life in Biological Universe and Evolution/Regulation of the Human System

Introduction

Actinidic archaea have been related to the pathogenesis of schizophrenia, malignancy, metabolic syndrome x, autoimmune disease and neuronal degeneration. An actinide dependent shadow biosphere of archaea and viroids in the above mentioned disease states is described. Actinidic archaea have a mevalonate pathway and are cholesterol catabolizing.[1-5] They can use cholesterol as a carbon and energy source. Archaeal cholesterol catabolism can generate porphyrins via the cholesterol ring oxidase generated pyruvate and GABA shunt pathway. Archaea can produce a secondary porphyria by inducing the enzyme heme oxygenase resulting in heme depletion and activation of the enzyme ALA synthase. Porphyrins have been related to schizophrenia, metabolic syndrome x, malignancy, systemic lupus erythematosis, multiple sclerosis and Alzheimer's diseases. The role of archaeal porphyrins in regulation of cell functions and neuro-immuno-endocrine integration is discussed. Porphyrins are prebiotic molecules which are involved in abiogenesis and origin of life.[1-5] The porphyrions are self replicating supramolecular organisms which forms the precursor template on which the viroids, prions and nanoarchaea originate. Stress induced template directed abiogenesis of porphyrions, prions, viroids and archaea is a continuous process and can contribute to changes in brain structure and behavior as well as disease process.

Materials and Methods

The following groups were included in the study: - endomyocardial fibrosis, Alzheimer's disease, multiple sclerosis, non-Hodgkin's lymphoma, metabolic syndrome x with cerebrovascular thrombosis and coronary artery disease,

schizophrenia, autism, seizure disorder, Creutzfeldt Jakob's disease and acquired immunodeficiency syndrome. There were 10 patients in each group and each patient had an age and sex matched healthy control selected randomly from the general population. The blood samples were drawn in the fasting state before treatment was initiated. Plasma from fasting heparinised blood was used and the experimental protocol was as follows (I) Plasma+phosphate buffered saline, (II) same as I+cholesterol substrate, (III) same as II+rutile 0.1 mg/ml, (IV) same as II+ciprofloxacine and doxycycline each in a concentration of 1 mg/ml. Cholesterol substrate was prepared as described by Richmond. Aliquots were withdrawn at zero time immediately after mixing and after incubation at 37℃ for 1 hour. The following estimations were carried out: - Cytochrome F420, free RNA, free DNA, polycyclic aromatic hydrocarbon, hydrogen peroxide, pyruvate, ammonia, glutamate, delta aminolevulinic acid, succinate, glycine and digoxin. Cytochrome F420 was estimated flourimetrically (excitation wavelength 420 nm and emission wavelength 520 nm). Polycyclic aromatic hydrocarbon was estimated by measuring hydrogen peroxide liberated by using glucose reagent. The study also involved estimating the following parameters in the patient population - digoxin, bile acid, hexokinase, porphyrins, pyruvate, glutamate, ammonia, acetyl CoA, acetyl choline, HMG CoA reductase, cytochrome C, blood ATP, ATP synthase, ERV RNA (endogenous retroviral RNA), H_2O_2 (hydrogen peroxide), NOX (NADPH oxidase), TNF alpha and heme oxygenase.[6-9] Informed consent of the subjects and the approval of the ethics committee were obtained for the study. The statistical analysis was done by ANOVA.

Results

Plasma of control subjects showed increased levels of the above mentioned parameters with after incubation for 1 hour and addition of cholesterol substrate resulted in still further significant increase in these parameters. The plasma of patients showed similar results but the extent of increase was more. The addition of antibiotics to the control plasma caused a decrease in all the parameters while addition of rutile increased their levels. The addition of antibiotics to the patient's plasma caused a decrease in all the parameters while addition of rutile increased their levels but the extent of change was more in patient's sera as compared to controls. The results are expressed in section 1: tables 1-6 as percentage change in the parameters after 1 hour incubation as compared to the values at zero time. There was upregulated archaeal porphyrin synthesis in the patient population which was archaeal in origin as indicated by actinide catalysis of the reactions. The cholesterol oxidase pathway generated pyruvate which entered the GABA shunt pathway. This resulted in synthesis of succinate and glycine which are substrates for ALA synthase.

The study showed the patient's blood and right hemispheric dominance had increased heme oxygenase activity and porphyrins. The hexokinase activity was high. The pyruvate, glutamate and ammonia levels were elevated indicating blockade of PDH activity, and operation of the GABA shunt pathway. The acetyl CoA levels were low and acetyl choline was decreased. The cyto C levels were increased in the serum indicating mitochondrial dysfunction suggested by low blood ATP levels. This was indicative of the Warburg's phenotype. There were increased NOX and TNF alpha levels indicating immune activation. The HMG CoA reductase activity was high indicating cholesterol synthesis. The bile acid levels were low indicating depletion of cytochrome P450. The normal population with right hemispheric dominance had values resembling the patient

population with increased porphyrin synthesis. The normal population with left hemispheric dominance had low values with decreased porphyrin synthesis.

Section 1: Experimental Study

Table 1. *Effect of rutile and antibiotics on cytochrome F420 and PAH.*

Group	CYT F420 % (Increase with Rutile)		CYT F420 % (Decrease with Doxy+Cipro)		PAH % change (Increase with Rutile)		PAH % change (Decrease with Doxy+Cipro)	
	Mean	±SD	Mean	±SD	Mean	±SD	Mean	±SD
Normal	4.48	0.15	18.24	0.66	4.45	0.14	18.25	0.72
Schizo	23.24	2.01	58.72	7.08	23.01	1.69	59.49	4.30
Seizure	23.46	1.87	59.27	8.86	22.67	2.29	57.69	5.29
AD	23.12	2.00	56.90	6.94	23.26	1.53	60.91	7.59
MS	22.12	1.81	61.33	9.82	22.83	1.78	59.84	7.62
NHL	22.79	2.13	55.90	7.29	22.84	1.42	66.07	3.78
DM	22.59	1.86	57.05	8.45	23.40	1.55	65.77	5.27
AIDS	22.29	1.66	59.02	7.50	23.23	1.97	65.89	5.05
CJD	22.06	1.61	57.81	6.04	23.46	1.91	61.56	4.61
Autism	21.68	1.90	57.93	9.64	22.61	1.42	64.48	6.90
EMF	22.70	1.87	60.46	8.06	23.73	1.38	65.20	6.20
F value	306.749		130.054		391.318		257.996	
P value	< 0.001		< 0.001		< 0.001		< 0.001	

Table 2. *Effect of rutile and antibiotics on free RNA and DNA.*

Group	DNA % change (Increase with Rutile)		DNA % change (Decrease with Doxy+Cipro)		RNA % change (Increase with Rutile)		RNA % change (Decrease with Doxy+Cipro)	
	Mean	±SD	Mean	±SD	Mean	±SD	Mean	±SD
Normal	4.37	0.15	18.39	0.38	4.37	0.13	18.38	0.48
Schizo	23.28	1.70	61.41	3.36	23.59	1.83	65.69	3.94
Seizure	23.40	1.51	63.68	4.66	23.08	1.87	65.09	3.48
AD	23.52	1.65	64.15	4.60	23.29	1.92	65.39	3.95
MS	22.62	1.38	63.82	5.53	23.29	1.98	67.46	3.96
NHL	22.42	1.99	61.14	3.47	23.78	1.20	66.90	4.10
DM	23.01	1.67	65.35	3.56	23.33	1.86	66.46	3.65
AIDS	22.56	2.46	62.70	4.53	23.32	1.74	65.67	4.16
CJD	23.30	1.42	65.07	4.95	23.11	1.52	66.68	3.97
Autism	22.12	2.44	63.69	5.14	23.33	1.35	66.83	3.27
EMF	22.29	2.05	58.70	7.34	22.29	2.05	67.03	5.97
F value	337.577		356.621		427.828		654.453	
P value	< 0.001		< 0.001		< 0.001		< 0.001	

Table 3. *Effect of rutile and antibiotics on digoxin and delta aminolevulinic acid.*

Group	Digoxin (ng/ml) (Increase with Rutile)		Digoxin (ng/ml) (Decrease with Doxy+Cipro)		ALA % (Increase with Rutile)		ALA % (Decrease with Doxy+Cipro)	
	Mean	±SD	Mean	±SD	Mean	±SD	Mean	±SD
Normal	0.11	0.00	0.054	0.003	4.40	0.10	18.48	0.39
Schizo	0.55	0.06	0.219	0.043	22.52	1.90	66.39	4.20
Seizure	0.51	0.05	0.199	0.027	22.83	1.90	67.23	3.45
AD	0.55	0.03	0.192	0.040	23.67	1.68	66.50	3.58
MS	0.52	0.03	0.214	0.032	22.38	1.79	67.10	3.82
NHL	0.54	0.04	0.210	0.042	23.34	1.75	66.80	3.43
DM	0.47	0.04	0.202	0.025	22.87	1.84	66.31	3.68
AIDS	0.56	0.05	0.220	0.052	23.45	1.79	66.32	3.63
CJD	0.53	0.06	0.212	0.045	23.17	1.88	68.53	2.65
Autism	0.53	0.08	0.205	0.041	23.20	1.57	66.65	4.26
EMF	0.51	0.05	0.213	0.033	22.29	2.05	61.91	7.56
F value	135.116		71.706		372.716		556.411	
P value	< 0.001		< 0.001		< 0.001		< 0.001	

Table 4. *Effect of rutile and antibiotics on succinate and glycine.*

Group	Succinate % (Increase with Rutile)		Succinate % (Decrease with Doxy+Cipro)		Glycine % change (Increase with Rutile)		Glycine % change (Decrease with Doxy+Cipro)	
	Mean	±SD	Mean	±SD	Mean	±SD	Mean	±SD
Normal	4.41	0.15	18.63	0.12	4.34	0.15	18.24	0.37
Schizo	22.76	2.20	67.63	3.52	22.79	2.20	64.26	6.02
Seizure	22.28	1.52	64.05	2.79	22.82	1.56	64.61	4.95
AD	23.81	1.90	66.95	3.67	23.12	1.71	65.12	5.58
MS	24.10	1.61	65.78	4.43	22.73	2.46	65.87	4.35
NHL	23.43	1.57	66.30	3.57	22.98	1.50	65.13	4.87
DM	23.70	1.75	68.06	3.52	23.81	1.49	64.89	6.01
AIDS	23.66	1.67	65.97	3.36	23.09	1.81	65.86	4.27
CJD	22.92	2.14	67.54	3.65	21.93	2.29	63.70	5.63
Autism	21.88	1.19	66.28	3.60	23.02	1.65	67.61	2.77
EMF	22.29	1.33	65.38	3.62	22.13	2.14	66.26	3.93
F value	403.394		680.284		348.867		364.999	
P value	< 0.001		< 0.001		< 0.001		< 0.001	

Table 5. *Effect of rutile and antibiotics on pyruvate and glutamate.*

Group	Pyruvate % change (Increase with Rutile)		Pyruvate % change (Decrease with Doxy+Cipro)		Glutamate (Increase with Rutile)		Glutamate (Decrease with Doxy+Cipro)	
	Mean	±SD	Mean	±SD	Mean	±SD	Mean	±SD
Normal	4.34	0.21	18.43	0.82	4.21	0.16	18.56	0.76
Schizo	20.99	1.46	61.23	9.73	23.01	2.61	65.87	5.27
Seizure	20.94	1.54	62.76	8.52	23.33	1.79	62.50	5.56
AD	22.63	0.88	56.40	8.59	22.96	2.12	65.11	5.91
MS	21.59	1.23	60.28	9.22	22.81	1.91	63.47	5.81
NHL	21.19	1.61	58.57	7.47	22.53	2.41	64.29	5.44
DM	20.67	1.38	58.75	8.12	23.23	1.88	65.11	5.14
AIDS	21.21	2.36	58.73	8.10	21.11	2.25	64.20	5.38
CJD	21.07	1.79	63.90	7.13	22.47	2.17	65.97	4.62
Autism	21.91	1.71	58.45	6.66	22.88	1.87	65.45	5.08
EMF	22.29	2.05	62.37	5.05	21.66	1.94	67.03	5.97
F value	321.255		115.242		292.065		317.966	
P value	< 0.001		< 0.001		< 0.001		< 0.001	

Table 6. *Effect of rutile and antibiotics on hydrogen peroxide and ammonia.*

Group	H_2O_2 % (Increase with Rutile)		H_2O_2 % (Decrease with Doxy+Cipro)		Ammonia % (Increase with Rutile)		Ammonia % (Decrease with Doxy+Cipro)	
	Mean	**±SD**	**Mean**	**±SD**	**Mean**	**±SD**	**Mean**	**±SD**
Normal	4.43	0.19	18.13	0.63	4.40	0.10	18.48	0.39
Schizo	22.50	1.66	60.21	7.42	22.52	1.90	66.39	4.20
Seizure	23.81	1.19	61.08	7.38	22.83	1.90	67.23	3.45
AD	22.65	2.48	60.19	6.98	23.67	1.68	66.50	3.58
MS	21.14	1.20	60.53	4.70	22.38	1.79	67.10	3.82
NHL	23.35	1.76	59.17	3.33	23.34	1.75	66.80	3.43
DM	23.27	1.53	58.91	6.09	22.87	1.84	66.31	3.68
AIDS	23.32	1.71	63.15	7.62	23.45	1.79	66.32	3.63
CJD	22.86	1.91	63.66	6.88	23.17	1.88	68.53	2.65
Autism	23.52	1.49	63.24	7.36	23.20	1.57	66.65	4.26
EMF	23.29	1.67	60.52	5.38	22.29	2.05	61.91	7.56
F value	380.721		171.228		372.716		556.411	
P value	< 0.001		< 0.001		< 0.001		< 0.001	

Section 2: Patient Study

Table 1

Group	RBC Digoxin (ng/ml RBC Susp)		Cytochrome F420		HERV RNA (ug/ml)		H_2O_2 (umol/ml RBC)	
	Mean	**±SD**	**Mean**	**±SD**	**Mean**	**±SD**	**Mean**	**±SD**
NO/BHCD	0.58	0.07	1.00	0.00	17.75	0.72	177.43	6.71
RHCD	1.41	0.23	4.00	0.00	55.17	5.85	278.29	7.74
LHCD	0.18	0.05	0.00	0.00	8.70	0.90	111.63	5.40
Schizo	1.38	0.26	4.00	0.00	51.17	3.65	274.88	8.73
Seizure	1.23	0.26	4.00	0.00	50.04	3.91	278.90	11.20
HD	1.34	0.31	4.00	0.00	51.16	7.78	295.37	3.78
AD	1.10	0.08	4.00	0.00	51.56	3.69	277.47	10.90
MS	1.21	0.21	4.00	0.00	47.90	6.99	280.89	11.25
SLE	1.50	0.33	4.00	0.00	48.20	5.53	278.59	11.51
NHL	1.26	0.23	4.00	0.00	51.08	5.24	283.39	10.67
Glio	1.27	0.24	4.00	0.00	51.57	2.66	278.19	12.80
DM	1.35	0.26	4.00	0.00	51.98	5.05	280.89	10.58
CAD	1.22	0.16	4.00	0.00	50.00	5.91	280.89	13.79
CVA	1.33	0.27	4.00	0.00	51.06	4.83	287.33	9.47
AIDS	1.31	0.24	4.00	0.00	50.15	6.96	278.58	12.72
CJD	1.48	0.27	4.00	0.00	49.85	6.40	286.16	10.90
Autism	1.19	0.24	4.00	0.00	52.87	7.04	274.52	9.29
DS	1.34	0.25	4.00	0.00	47.28	3.55	283.04	9.17
Cerebral Palsy	1.44	0.19	4.00	0.00	53.49	4.15	273.70	12.37
CRF	1.26	0.26	4.00	0.00	49.39	5.51	285.51	8.79
Cirr/Hep Fail	1.50	0.20	4.00	0.00	46.82	4.73	275.97	10.66
Muc Angio	1.40	0.32	4.00	0.00	46.37	4.87	290.37	9.10
EMF	1.51	0.29	4.00	0.00	47.47	4.34	287.49	9.81
CCP	1.35	0.22	4.00	0.00	48.54	5.97	277.50	7.51
Exposure to EMF	1.41	0.30	4.00	0.00	51.01	4.77	276.49	10.92
F value	60.288		0.001		194.418		713.569	
P value	< 0.001		< 0.001		< 0.001		< 0.001	

Table 2

Group	NOX (OD diff/hr/mgpro)		TNF ALP (pg/ml)		ALA (umol24)		PBG (umol24)	
	Mean	**±SD**	**Mean**	**±SD**	**Mean**	**±SD**	**Mean**	**±SD**
NO/BHCD	0.012	0.001	17.94	0.59	15.44	0.50	20.82	1.19
RHCD	0.036	0.008	78.63	5.08	63.50	6.95	42.20	8.50
LHCD	0.007	0.001	9.29	0.81	3.86	0.26	12.11	1.34
Schizo	0.036	0.009	78.23	7.13	66.16	6.51	42.50	3.23
Seizure	0.038	0.007	79.28	4.55	68.28	6.02	46.54	4.55
HD	0.035	0.011	82.13	3.97	67.30	5.98	47.25	4.19
AD	0.036	0.007	79.65	5.57	67.32	5.40	49.83	3.45
MS	0.034	0.009	80.18	5.67	64.00	7.33	46.85	3.49
SLE	0.038	0.008	81.03	6.22	65.01	5.42	48.55	3.81
NHL	0.041	0.006	77.98	5.68	63.21	6.55	47.17	4.86
Glio	0.038	0.007	79.18	5.88	67.67	5.69	46.84	4.43
DM	0.041	0.005	78.36	6.68	64.72	6.81	48.15	3.36
CAD	0.038	0.009	78.15	3.72	66.66	7.77	47.00	3.81
CVA	0.037	0.007	77.59	5.24	69.02	4.86	46.33	4.01
AIDS	0.039	0.010	79.17	5.88	67.78	4.41	48.03	3.64
CJD	0.039	0.006	80.41	5.70	66.99	3.71	47.94	5.33
Autism	0.036	0.006	76.71	5.25	68.16	4.92	42.04	2.38
DS-50	0.035	0.009	80.30	6.65	64.99	6.72	45.69	4.18
Cerebral Palsy	0.038	0.008	80.02	6.82	65.56	6.28	44.58	4.52
CRF	0.039	0.008	81.36	5.37	67.61	5.55	46.81	4.62
Cirr/Hep Fail	0.037	0.010	77.61	4.42	66.28	6.55	48.23	2.36
Muc Angio	0.039	0.010	79.38	5.14	67.86	5.65	44.08	2.81
EMF	0.035	0.008	80.04	4.69	64.76	5.23	44.82	3.46
CCP	0.040	0.006	80.34	4.73	66.68	4.14	48.70	3.35
Exposure to EMF	0.038	0.007	76.41	5.96	68.41	5.53	47.27	3.42
F value	44.896		427.654		295.467		183.296	
P value	< 0.001		< 0.001		< 0.001		< 0.001	

Table 3

Group	Uroporphyrin (nmol24)		Coproporphyrin (nmol/24)		Protoporphyrin (Ab unit)		Heme (uM)	
	Mean	**±SD**	**Mean**	**±SD**	**Mean**	**±SD**	**Mean**	**±SD**
NO/BHCD	50.18	3.54	137.94	4.75	10.35	0.38	30.27	0.81
RHCD	250.28	23.43	389.01	54.11	42.46	6.36	12.47	2.82
LHCD	9.51	1.19	64.33	13.09	2.64	0.42	50.55	1.07
Schizo	267.81	64.05	401.49	50.73	44.30	2.66	12.82	2.40
Seizure	290.44	57.65	436.71	52.95	49.59	1.70	13.03	0.70
HD	286.84	24.18	432.22	50.11	49.36	4.18	11.81	0.80
AD	259.61	33.18	433.17	45.61	49.68	3.30	12.09	1.12
MS	277.36	15.48	440.35	25.34	50.81	3.21	11.87	1.84
SLE	294.51	58.62	447.39	39.84	52.94	3.67	12.95	1.53
NHL	310.25	40.44	495.98	39.11	54.80	4.04	11.76	1.37
Glio	304.19	14.16	479.35	58.86	53.73	5.34	13.68	1.67
DM	285.46	29.46	422.27	33.86	49.80	4.01	12.83	2.07
CAD	314.01	17.82	426.14	24.28	49.51	2.27	11.39	1.10
CVA	320.85	24.73	402.16	33.80	46.74	4.28	11.26	0.95
AIDS	306.61	22.47	429.72	24.97	49.32	5.13	11.60	1.23
CJD	317.92	29.63	429.24	18.29	50.02	4.58	11.76	1.32
Autism	318.84	82.90	423.29	47.57	47.50	2.87	12.37	2.09
DS-50	258.33	37.85	421.52	36.57	50.97	7.07	11.81	1.14
Cerbral Palsy	280.16	26.14	431.39	28.88	49.23	3.91	11.61	1.36
CRF	301.78	48.22	427.57	33.55	49.66	4.41	12.03	1.40
Cirr/Hep Fail	276.51	16.66	436.44	25.65	50.56	1.63	11.92	1.33
Muc Angio	303.86	13.91	441.58	25.51	47.86	3.34	12.13	1.10
EMF	300.90	31.96	443.22	38.14	51.37	4.86	12.61	2.00
CCP	287.09	15.63	442.85	49.61	50.36	3.49	12.01	1.53
Exposure to EMF	288.21	26.17	444.94	38.89	50.59	1.71	12.36	1.26
F value	160.533		279.759		424.198		1472.05	
P value	< 0.001		< 0.001		< 0.001		< 0.001	

Table 4

Group	Bilirubin (mg/dl)		Biliverdin (Ab unit)		ATP Synthase (umol/gHb)		SE ATP (umol/dl)	
	Mean	**±SD**	**Mean**	**±SD**	**Mean**	**±SD**	**Mean**	**±SD**
NO/BHCD	0.55	0.02	0.030	0.001	0.36	0.13	0.42	0.11
RHCD	1.70	0.20	0.067	0.011	2.73	0.94	2.24	0.44
LHCD	0.21	0.00	0.017	0.001	0.09	0.01	0.02	0.01
Schizo	1.74	0.08	0.073	0.013	2.66	0.58	1.26	0.19
Seizure	1.84	0.07	0.070	0.015	3.09	0.65	1.66	0.56
HD	1.83	0.09	0.071	0.014	3.34	0.84	1.27	0.26
AD	1.77	0.13	0.073	0.016	3.34	0.75	2.06	0.19
MS	1.81	0.10	0.079	0.007	3.05	0.52	1.63	0.26
SLE	1.82	0.08	0.061	0.006	2.85	0.34	1.59	0.22
NHL	1.84	0.08	0.077	0.011	3.01	0.55	1.73	0.26
Glio	1.76	0.11	0.073	0.012	2.70	0.62	1.48	0.32
DM	1.77	0.19	0.067	0.014	3.19	0.89	1.97	0.11
CAD	1.75	0.12	0.080	0.007	2.99	0.65	1.57	0.37
CVA	1.82	0.10	0.079	0.009	2.98	0.78	1.49	0.27
AIDS	1.79	0.08	0.072	0.013	3.29	0.63	1.59	0.38
CJD	1.82	0.09	0.066	0.009	3.21	0.95	1.69	0.43
Autism	1.83	0.16	0.072	0.014	2.67	0.80	2.03	0.12
DS-50	1.85	0.07	0.071	0.015	3.15	0.73	1.17	0.11
Cerebral Palsy	1.85	0.09	0.069	0.012	3.14	0.46	1.56	0.39
CRF	1.76	0.22	0.070	0.012	3.14	0.57	1.53	0.33
Cirr/Hep Fail	1.81	0.10	0.076	0.009	3.01	0.47	1.32	0.26
Muc Angio	1.78	0.24	0.067	0.014	2.92	0.55	1.35	0.29
EMF	1.79	0.07	0.074	0.009	3.12	0.60	1.56	0.48
CCP	1.84	0.07	0.073	0.011	3.15	0.46	1.51	0.38
Exposure to EMF	1.75	0.22	0.073	0.013	3.39	1.03	1.37	0.27
F value	370.517		59.963		54.754		67.588	
P value	< 0.001		< 0.001		< 0.001		< 0.001	

Table 5

Group	Cyto C (ng/ml)		Lactate (mg/dl)		Pyruvate (umol/l)		RBC Hexokinase (ug glu phos / hr/mgpro)	
	Mean	**±SD**	**Mean**	**±SD**	**Mean**	**±SD**	**Mean**	**±SD**
NO/BHCD	2.79	0.28	7.38	0.31	40.51	1.42	1.66	0.45
RHCD	12.39	1.23	25.99	8.10	100.51	12.32	5.46	2.83
LHCD	1.21	0.38	2.75	0.41	23.79	2.51	0.68	0.23
Schizo	11.58	0.90	22.07	1.06	96.54	9.96	7.69	3.40
Seizure	12.06	1.09	21.78	0.58	90.46	8.30	6.29	1.73
HD	12.65	1.06	24.28	1.69	95.44	12.04	9.30	3.98
AD	11.94	0.86	22.04	0.64	97.26	8.26	8.46	3.63
MS	11.81	0.67	23.32	1.10	102.48	13.20	8.56	4.75
SLE	11.73	0.56	23.06	1.49	100.51	9.79	8.02	3.01
NHL	11.91	0.49	22.83	1.24	95.81	12.18	7.41	4.22
Glio	13.00	0.42	22.20	0.85	96.58	8.75	7.82	3.51
DM	12.95	0.56	25.56	7.93	96.30	10.33	7.05	1.86
CAD	11.51	0.47	22.83	0.82	97.29	12.45	8.88	3.09
CVA	12.74	0.80	23.03	1.26	103.25	9.49	7.87	2.72
AIDS	12.29	0.89	24.87	4.14	95.55	7.20	9.84	2.43
CJD	12.19	1.22	23.02	1.61	96.50	5.93	8.81	4.26
Autism	12.48	0.79	21.95	0.65	92.71	8.43	6.95	2.02
DS-50	12.79	1.15	23.69	2.19	91.81	4.12	8.68	2.60
Cerebral Palsy	12.14	1.30	23.12	1.81	95.33	11.78	7.92	3.32
CRF	12.66	1.01	23.42	1.20	97.38	10.76	7.75	3.08
Cirr/Hep Fail	12.81	0.90	26.20	5.29	97.77	13.24	8.99	3.27
Muc Angio	12.84	0.74	23.64	1.43	96.19	12.15	10.12	1.75
EMF	12.72	0.92	25.35	5.52	103.32	13.04	9.44	3.40
CCP	12.23	0.94	23.66	1.64	94.36	8.06	8.53	2.64
Exposure to EMF	12.26	1.00	23.31	1.46	103.28	11.47	7.58	3.09
F value	445.772		162.945		154.701		18.187	
P value	< 0.001		< 0.001		< 0.001		< 0.001	

Table 6

Group	ACOA (mg/dl)		ACH (ug/ml)		Glutamate (mg/dl)	
	Mean	**±SD**	**Mean**	**±SD**	**Mean**	**±SD**
NO/BHCD	8.75	0.38	75.11	2.96	0.65	0.03
RHCD	2.51	0.36	38.57	7.03	3.19	0.32
LHCD	16.49	0.89	91.98	2.89	0.16	0.02
Schizo	2.51	0.57	48.52	6.28	3.41	0.41
Seizure	2.15	0.22	33.27	5.99	3.67	0.38
HD	1.95	0.06	35.02	5.85	3.14	0.32
AD	2.19	0.15	42.84	8.26	3.53	0.39
MS	2.03	0.09	39.99	12.61	3.58	0.36
SLE	2.54	0.38	49.30	7.26	3.37	0.38
NHL	2.30	0.26	50.58	3.82	3.48	0.46
Glio	2.34	0.43	42.51	11.58	3.28	0.39
DM	2.17	0.40	41.31	10.69	3.53	0.44
CAD	2.37	0.44	49.19	6.86	3.61	0.28
CVA	2.25	0.44	37.45	7.93	3.31	0.43
AIDS	2.11	0.19	38.40	7.74	3.45	0.49
CJD	2.10	0.27	34.97	4.24	3.94	0.22
Autism	2.42	0.41	50.61	6.32	3.30	0.32
DS-50	2.01	0.08	39.34	8.15	3.30	0.48
Cerebral Palsy	2.06	0.35	40.79	9.34	3.24	0.34
CRF	2.24	0.32	37.52	4.37	3.26	0.43
Cirr/Hep Fail	2.13	0.17	46.20	4.95	3.25	0.40
Muc Angio	2.51	0.42	45.51	7.56	3.11	0.36
EMF	2.19	0.19	42.48	8.62	3.27	0.39
CCP	2.04	0.10	37.95	8.82	3.33	0.25
Exposure to EMF	2.14	0.19	37.75	7.31	3.47	0.37
F value	1871.04		116.901		200.702	
P value	< 0.001		< 0.001		< 0.001	

Table 7

Group	Se. Ammonia (ug/dl)		HMG Co A (HMG CoA/MEV)		Bile Acid (mg/ml)	
	Mean	**±SD**	**Mean**	**±SD**	**Mean**	**±SD**
NO/BHCD	50.60	1.42	1.70	0.07	79.99	3.36
RHCD	93.43	4.85	1.16	0.10	25.68	7.04
LHCD	23.92	3.38	2.21	0.39	140.40	10.32
Schizo	94.72	3.28	1.11	0.08	22.45	5.57
Seizure	95.61	7.88	1.14	0.07	22.98	5.19
HD	94.60	8.52	1.08	0.13	28.93	4.93
AD	95.37	4.66	1.10	0.07	26.26	7.34
MS	93.42	3.69	1.13	0.08	24.12	6.43
SLE	101.18	17.06	1.14	0.07	19.62	1.97
NHL	91.62	3.24	1.12	0.10	23.45	5.01
Glio	93.20	4.46	1.10	0.09	23.43	6.03
DM	93.38	7.76	1.09	0.12	22.77	4.94
CAD	93.93	4.86	1.07	0.12	24.55	6.26
CVA	103.18	27.27	1.05	0.09	22.39	3.35
AIDS	92.47	3.97	1.08	0.11	23.28	5.81
CJD	93.13	5.79	1.09	0.12	21.26	4.81
Autism	94.01	5.00	1.12	0.06	23.16	5.78
DS-50	98.81	15.65	1.09	0.11	21.31	4.49
Cerebral Palsy	92.09	3.21	1.07	0.09	22.80	5.02
CRF	98.76	11.12	1.03	0.10	26.47	5.30
Cirr/Hep Fail	94.77	2.86	1.04	0.10	24.91	5.06
Muc Angio	92.40	4.34	1.12	0.08	24.37	4.38
EMF	95.37	5.76	1.08	0.08	25.17	3.80
CCP	93.42	5.34	1.01	0.09	23.87	4.00
Exposure to EMF	102.62	26.54	1.00	0.07	22.58	5.07
F value	61.645		159.963		635.306	
P value	< 0.001		< 0.001		< 0.001	

Abbreviations

NO/BHCD: Normal/Bi-hemispheric chemical dominance

RHCD: Right hemispheric chemical dominance

LHCD: Left hemispheric chemical dominance

Schizo: Schizophrenia

HD: Huntington's disease

AD: Alzheimer's disease

MS: Multiple sclerosis

SLE: Systemic lupus erythematosis

NHL: Non-Hodgkin's lymphoma

Glio - Glioma

DM: Diabetes mellitus

CAD: Coronary artery disease

CVA: Cerebrovascular accident

AIDS: Acquired immunodeficiency syndrome

CJD: Creutzfeldt Jakob's disease

DS: Down syndrome

CRF: Chronic renal failure

Cirr/Hep Fail - Cirrhosis/Hepatic failure

EMF: Endomyocardial fibrosis

CCP: Chronic calcific pancreatitis

Discussion

There was increase in cytochrome F420 indicating archaeal growth. The archaea can synthesize and use cholesterol as a carbon and energy source.[2, 10] The archaeal origin of the enzyme activities was indicated by antibiotic induced suppression. The study indicates the presence of actinide based archaea with an alternate actinide based enzymes or metalloenzymes in the system as indicated by rutile induced increase in enzyme activities.[11] The archaeal beta hydroxyl steroid dehydrogenase activity indicating digoxin synthesis.[12] The archaeal cholesterol oxidase activity was increased resulting in generation of pyruvate and hydrogen peroxide.[10] The pyruvate gets converted to glutamate and ammonia by the GABA shunt pathway. The pyruvate is converted to glutamate by serum glutamate pyruvate transaminase. The glutamate gets acted upon by glutamate dehydrogenase to generate alpha ketoglutarate and ammonia. Alanine is most commonly produced by the reductive amination of pyruvate via alanine transaminase. This reversible reaction involves the interconversion of alanine and pyruvate, coupled to the interconversion of alpha-ketoglutarate (2-oxoglutarate) and glutamate. Alanine can contribute to glycine. Glutamate is acted upon by Glutamic acid decarboxylase to generate GABA. GABA is converted to succinic semialdehyde by GABA transaminase. Succinic semialdehyde is converted to succinic acid by succinic semialdehyde dehydrogenase. Glycine combines with succinyl CoA to generate delta aminolevulinic acid catalysed by the enzyme ALA synthase. There was upregulated archaeal porphyrin synthesis in the patient population which was archaeal in origin as indicated by actinide catalysis of the reactions. The cholesterol oxidase pathway generated pyruvate which entered the GABA shunt pathway. This resulted in synthesis of succinate and glycine which are

substrates for ALA synthase. The archaea can undergo magnetite and calcium carbonate mineralization and can exist as calcified nanoforms.[13]

The possibility of Warburg phenotype induced by actinide based primitive organism like archaea with a mevalonate pathway and cholesterol catabolism was considered in this paper. The Warburg phenotype results in inhibition of pyruvate dehydrogenase and the TCA cycle. The pyruvate enters the GABA shunt pathway where it is converted to succinyl CoA. The glycolytic pathway is upregulated and the glycolytic metabolite phosphoglycerate is converted to serine and glycine. Glycine and succinyl CoA are the substrates for ALA synthesis. The archaea induces the enzyme heme oxygenase. Heme oxygenase converts heme to bilirubin and biliverdin. This depletes heme from the system and results in upregulation of ALA synthase activity resulting in porphyria. Heme inhibits HIF alpha. The heme depletion results in upregulation of HIF alpha activity and further strengthening of the Warburg phenotype. The porphyrin self oxidation results in redox stress which activates HIF alpha and generates the Warburg phenotype. The Warburg phenotype results in channeling acetyl CoA for cholesterol synthesis as the TCA cycle and mitochondrial oxidative phosphorylation are blocked. The archaea uses cholesterol as an energy substrate. Porphyrin and ALA inhibits sodium potassium ATPase. This increases cholesterol synthesis by acting upon intracellular SREBP. The cholesterol is metabolized to pyruvate and then the GABA shunt pathway for ultimate use in porphyrin synthesis. The porphyrins can self organize and self replicate into macromolecular arrays. The porphyrin arrays behave like an autonomous organism and can have intramolecular electron transport generating ATP. The porphyrin macroarrays can store information and can have quantal perception. The porphyrin macroarrays serves the purpose of archaeal energetics and sensory perception. The Warburg

phenotype is associated with malignancy, autoimmune disease and metabolic syndrome x.

The role of archaeal porphyrins in regulation of cell functions and neuro-immuno-endocrine integration is discussed. Protoporphyrin binds to the peripheral benzodiazepine receptor regulating steroid and digoxin synthesis. Increased porphyrin metabolites can contribute to hyperdigoxinemia. Digoxin can modulate the neuro-immuno-endocrine system. Porphyrins can combine with membranes modulating membrane function. Porphyrins can combine with proteins oxidizing their tyrosine, tryptophan, cysteine and histidine residues producing crosslinking and altering protein conformation and function. Porphyrins can complex with DNA and RNA modulating their function. Porphyrin interpolating with DNA can alter transcription and generate HERV expression. Heme deficiency can also result in disease states. Heme deficiency results in deficiency of heme enzymes. There is deficiency of cytochrome C oxidase and mitochondrial dysfunction. The glutathione peroxidase is dysfunctional and the glutathione system of free radical scavenging does not function. The cytochrome P450 enzymes involved in steroid and bile acid synthesis have reduced activity leading to steroid - cortisol and sex hormones as well as bile acid deficiency states. The heme deficiency results in dysfunction of nitric oxide synthase, heme oxygenase and cystathione beta synthase resulting in lack of gasotransmitters regulating the vascular system and NMDA receptor - NO, CO and H_2S. Heme has got cytoprotective, neuroprotective, anti-inflammatory and antiproliferative effects. Heme is also involved in the stress response. Heme deficiency leads to metabolic syndrome, immune disease, degenerations and cancer.[3-5]

The porphyrins can undergo photo-oxidation and auto-oxidation generating free radicals. The archaeal porphyrins can produce free radical injury. Free

radicals produce NFKB activation, open the mitochondrial PT pore resulting in cell death, produce oncogene activation, activate NMDA receptor and GAD enzyme regulating neurotransmission and generates the Warburg phenotypes activating glycolysis and inhibiting TCA cycle/oxphos. Porphyrins have been related to schizophrenia, metabolic syndrome x, malignancy, systemic lupus erythematosis, multiple sclerosis and Alzheimer's diseases. The porphyrins can complex and intercalate with the cell membrane producing sodium potassium ATPase inhibition adding on to digoxin mediated inhibition. Porphyrins can complex with proteins and nucleic acid producing biophoton emission. Porphyrins complexing with proteins can modulate protein structure and function. Porphyrins complexing with DNA and RNA can modulate transcription and translation. The porphyrin especially protoporphyrins can bind to peripheral benzodiazepine receptors in the mitochondria and modulate its function, mitochondrial cholesterol transport and steroidogenesis. Peripheral benzodiazepine receptor modulation by protoporphyrins can regulate cell death, cell proliferation, immunity and neural functions. The porphyrin photo-oxidation generates free radicals which can modulate enzyme function. Redox stress modulated enzymes include pyruvate dehydrogenase, nitric oxide synthase, cystathione beta synthase and heme oxygenase. Free radicals can modulate mitochondrial PT pore function. Free radicals can modulate cell membrane function and inhibit sodium potassium ATPase activity. Thus the porphyrins are key regulatory molecules modulating all aspects of cell function.[3-5] There was an increase in free RNA indicating self replicating RNA viroids and free DNA indicating generation of viroid complementary DNA strands by archaeal reverse transcriptase activity. The actinides and porphyrins modulate RNA folding and catalyse its ribozymal action. Digoxin can cut and paste the viroidal strands by modulating RNA splicing generating RNA viroidal diversity. The viroids are evolutionarily escaped archaeal group I introns which

have retrotransposition and self splicing qualities. Archaeal pyruvate producing histone deacetylase inhibition and porphyrins intercalating with DNA can produce endogenous retroviral (HERV) reverse transcriptase and integrase expression. This can integrate the RNA viroidal complementary DNA into the noncoding region of eukaryotic noncoding DNA using HERV integrase as has been described for borna and ebola viruses. The archaea and viroids can also induce cellular porphyrin synthesis. Bacterial and viral infections can precipitate porphyria. Thus porphyrins can regulate genomic function. The increased expression of HERV RNA can result in acquired immunodeficiency syndrome, autoimmune disease, neuronal degenerations, schizophrenia and malignancy.[14, 15]

The archaea and viroids can regulate the nervous system including the NMDA/GABA thalamo-cortico-thalamic pathway mediating conscious perception. Porphyrin photo-oxidation can generate free radicals which can modulate NMDA transmission. Free radicals can increase NMDA transmission. Free radicals can induce GAD and increase GABA synthesis. ALA blocks GABA transmission and upregulates NMDA. Protoporphyrins bind to GABA receptor and promote GABA transmission. Thus porphyrins can modulate the thalamo-cortico-thalamic pathway of conscious perception. The dipolar porphyrins, PAH and archaeal magnetite in the setting of digoxin induced sodium potassium ATPase inhibition can produce a pumped phonon system mediated Frohlich model superconducting state inducing quantal perception with nanoarchaeal sensed gravity producing the orchestrated reduction of the quantal possibilities to the macroscopic world. ALA can produce sodium potassium ATPase inhibition resulting in a pumped phonon system mediated quantal state involving dipolar porphyrins. Porphyrin molecules have a wave particle existence and can bridge the dividing line between quantal state and particulate state. Thus the porphyrins can mediate conscious and quantal perception. Porphyrins binding to proteins, nucleic acids and cell membranes can produce biophoton emission.

Porphyrins by autooxidation can generate biophotons and are involved in quantal perception. Biophotons can mediate quantal perception. Cellular porphyrins photooxidation are involved in sensing of earth magnetic fields and low level biomagnetic fields. Thus prophyrins can mediate extrasensory perception. The porphyrins can modulate hemispheric dominance. There is increased porphyrin synthesis and right hemispherical chemical dominance and decreased porphyrin synthesis in left hemispherical chemical dominance. The increase in archaeal porphyrins can contribute to the pathogenesis of schizophrenia and autism. Porphyria can lead to psychiatric disorders and seizures. Altered porphyrin metabolism has been described in autism. Porphyrin by modulating conscious and quantal perception is involved in the pathogenesis of schizophrenia and autism. Protoporphyrins block acetyl choline transmission producing a vagal neuropathy with sympathetic overactivity. Vagal neuropathy results in immune activation, vasospasm and vascular disease. A vagal neuropathy underlines neoplastic and autoimmune processes as well as metabolic syndrome x. Porphyrin induced increased NMDA transmission and free radical injury can contribute to neuronal degeneration. Free radicals can produce mitochondrial PT pore dysfunction. This can lead to cyto C leak and activation of the caspase cascade leading to apoptosis and cell death. Altered porphyrin metabolism has been described in Alzheimer's disease. The increased porphyrin photo-oxidation generated free radicals mediated NMDA transmission can also contribute to epileptogenesis. The protoporphyrins binding to mitochondrial benzodiazepine receptors can regulate brain function and cell death.[3, 4, 16]

The porphyrin photo-oxidation can generate free radicals which can activate NFKB. This can produce immune activation and cytokine mediated injury. The increase in archaeal porphyrins can lead to autoimmune disease like SLE and MS. A hereditary form of MS and SLE related to altered porphyrin metabolism has been described. The protoporphyrins binding to mitochondrial

benzodiazepine receptors can modulate immune function. Porphyrins can combine with proteins oxidizing their tyrosine, tryptophan, cysteine and histidine residues producing crosslinking and altering protein conformation and function. Porphyrins can complex with DNA and RNA modulating their structure. Porphyrin complexed with proteins and nucleic acids are antigenic and can lead onto autoimmune disease.[3, 4] The porphyrin photooxidation mediated free radical injury can lead to insulin resistance and atherogenesis. Thus archaeal porphyrins can contribute to metabolic syndrome x. Glucose has got a negative effect upon ALA synthase activity. Therefore hyperglycemia may be reactive protective mechanism to increased archaeal porphyrin synthesis. The protoporphyrins binding to mitochondrial benzodiazepine receptors can modulate mitochondrial steroidogenesis and metabolism. Altered porphyrin metabolism has been described in the metabolic syndrome x. Porphyrias can lead onto vascular thrombosis.[3, 4] The porphyrin photooxidation can generate free radicals inducing HIF alpha and producing oncogene activation. Heme deficiency can lead to activation of HIF alpha and oncogenesis. This can lead to oncogenesis. Hepatic porphyrias induced hepatocellular carcinoma. The protoporphyrins binding to mitochondrial benzodiazepine receptors can regulate cell proliferation.[3, 4] The porphyrin can combine with prion proteins modulating their conformation. This leads to abnormal prion protein conformation and degradation. Archaeal porphyrins can contribute to prion disease. The porphyrins can intercalate with DNA producing HERV expression. The HERV particles generated can contribute to the retroviral state. The porphyrins in the blood can combine with bacteria and viruses and the photo-oxidation generated free radicals can kill them. The archaeal porphyrins can modulate bacterial and viral infections. The archaeal porphyrins are regulatory molecules keeping other prokaryotes and viruses on check.[3, 4] Thus the archaeal porphyrins can contribute to the pathogenesis of metabolic syndrome x, malignancy,

psychiatric disorders, autoimmune disease, AIDS, prion disease, neuronal degeneration and epileptogenesis. Archaeal porphyrin synthesis is crucial in the pathogenesis of these disorders. Porphyrins may serve as regulatory molecules modulating immune, neural, endocrine, metabolic and genetic systems. The porphyrins photooxidation generated free radicals can produce immune activation, produce cell death, activate cell proliferation, produce insulin resistance and modulate conscious / quantal perception. The archaeal porphyrins functions as key regulatory molecules with mitochondrial benzodiazepine receptors playing an important role.[3, 4]

The metal actinides provide radiolytic energy, catalysis for oligomer formation and provide a coordinating ion for metalloenzymes all important in abiogenesis.[6] The metal actinide surfaces would by surface metabolism generate porphyrins from simple compounds like succinic acid and glycine. Porphyrins can exist as wave forms and particulate forms and can bridge the dividing line between the quantal world and particulate world. Porphyrin molecules can self organize into organisms with energy transduction, ATP synthesis and information storage with replicating capacity. A self replicating porphyrin microorganism may have played a role in the origin of life. Porphyrins can form templates on which macromolecules like polysaccharides, protein and nucleic acids can form. The macromolecules generated on actinidic porphyrins templates would have contributed to the actinidic nanoarchaea and the original organisms on earth. The data supports the persistence of an actinidic archaeal shadow biosphere which throws light on the actinide based origin of life and porphyrins as the premier prebiotic molecule.[17, 18]

Porphyrins play an important role in the genesis of the biological universe. The porphyrin macroarrays can form in the interstellar space on its own as porphyrins can exist both as particles and waves. Porphyrins form the bridging connection

between the quantal world and the particulate world. The self generated porphyrins from the quantal foam can self organize to form macroarrays, can store information and self replicate. This can be called as an abiotic porphyrin organism. The porphyrin template would have generated nucleic acids, proteins, polysaccharides and isoprenoids. This would have generated actinidic nanoarchaea in the interstellar space. The porphyrins have magnetic properties and the interstellar porphyrin organism can contribute to the interstellar grains and interstellar magnetic fields.[37] The cosmic dust grains of porphyrin macroarrays/nanoarchaeal organism occupy the intergalactic space and are thought to be formed of magnetotactic bacteria identified according to their spectral signatures. According to the Hoyle's hypothesis, the cosmic dust magnetotactic porphyrin macroarrays/nanoarchaeal organism plays a role in the formation of the intergalactic magnetic field. A magnetic field equal in strength to about one millionth part of the magnetic field of earth exists throughout much of our galaxy. The magnetic files can be used to trace the spiral arms of the galaxy following a pattern of field lines that connect young stars and dust in which new stars are formed at a rapid rate. Studies have shown that a fraction of the dust particles have elongated shape similar to bacilli and they are systematically lined up in our galaxy. Moreover the direction of alignment is such that the long axes of the dust tend to be at right angles to the direction of the galactic magnetic field at every point. Magnetotactic porphyrin macroarrays/nanoarchaeal organisms have the property to affect the degree of alignment that is observed. The fact that the magnetotactic porphyrin macroarrays/nanoarchaeal organisms appear to be connected to the magnetic field lines that thread through the spiral arms of the galaxy connecting one region of star formation to another support a role for them in star formation and in the mass distribution and rotation of stars. The nutrient supply for a population of interstellar porphyrin macroarrays/nanoarchaeal organisms comes from mass flows out of supernovas populating the galaxy.

Giants arising in the evolution of such stars experience a phenomenon in which material containing nitrogen, carbon monoxide, hydrogen, helium, water and trace elements essential for life flows continuously outward into space. The interstellar organisms need liquid water. Water exists only as vapour or solid in the interstellar space and only through star formation leading to associated planets and cometary bodies can there be access to liquid water. To control conditions leading to star formation is of paramount importance in cosmic biology. The rate of star formation is controlled by two factors: Too high a rate of star formation produces a destructive effect of UV radiation and destroys cosmic biology. Star formation as stated before produces water crucial for organism growth. Cosmic biology of magnetotactic organisms and star formation are thus closely interlinked. Systems like solar systems do not arise in random condensation of blobs of interstellar gas. Only by a rigorous control of rotation of various parts of the system would galaxies and solar system evolved. The key to maintaining control over rotation seems to lie in the intergalactic magnetic field as indeed the whole phenomena of star formation. The intergalactic magnetic fields owes its origin to the lining up of magnetotactic porphyrin macroarrays/nanoarchaeal organisms and the cosmic biology of interstellar organisms can prosper only by maintaining a firm grip on the interstellar magnetic field and hence on the rate of star formation and type of star system produced. This point to a cosmic intelligence or brain capable of computation, analysis and exploration of the universe at large - of magnetotactic porphyrin macroarrays/nanoarchaeal organism networks. The origin of life on earth according to the Hoyle's hypothesis would be by seeding of porphyrin macroarrays/nanoarchaeal organism from the outer intergalactic space. The porphyrin organism can also be generated on actinidic surfaces in earth. Comets carrying porphyrin organisms would have interacted with the earth. A thin skin of graphitized material around a single porphyrin macroarrays/nanoarchaeal organism or clumps of organism can shield

the interior from destruction by UV light. The sudden surge and diversification of species of plants and animals and their equally sudden extinction has seen from fossil records point to sporadic evolution produced by induction of fresh cometary genes with the arrival of each major new crop of comets.[38, 39] The porphyrin macroarrays organism can have a wave particle existence and bridge the world of bosons and fermions. The porphyrin macroarrays/nanoarchaeal organism can form biofilms and the porphyrin organism can form a molecular quantum computing cloud in the biofilm which forms an interstellar intelligence regulating the formation of star systems and galaxies. The porphyrin macroarrays/nanoarchaeal organism quantal computing cloud can bridge the wave particle world functioning as the anthropic observer sensing gravity which orchestrates the reduction of the quantal world of possibilities in to the macroscopic world. The actinide based porphyrin macroarrays/nanoarchaeal organism regulates the human system and biological universe.[19-21]

Porphyrins also have evolutionary significance since porphyria is related to Scythian races and contributes to the behavioural and intellectual characteristics of this group of population. Porphyrins can intercalate into DNA and produce HERV expression. HERV RNA can get converted to DNA by reverse transcriptase which can get integrated into DNA by integrase. This tends to increase the length of the noncoding region of the DNA. The increase in noncoding region of the DNA is involved in primate and human evolution. Thus, increased rates of porphyrin synthesis would correlate with increase in noncoding DNA length. The alteration in the length of the noncoding region of the DNA contributes to the dynamic nature of the genome. Thus genetic and acquired porphyrias can lead to alteration in the noncoding region of the genome. The alteration of the length of the noncoding region of the DNA contributes to the racial and individual differences in populations. An increased length of noncoding region as well as increased porphyrin synthesis leads to

increased cognitive and creative neuronal function. Porphyrins are involved in quantal perception and regulation of the thalamo-cortico-thalamic pathway of conscious perception. Thus genetic and acquired porphyrias contribute to higher cognitive and creative capacity of certain races. Porphyrias are common among Eurasian Scythian races who have assumed leadership roles in communities and groups. Porphyrins have contributed to human and primate evolution.[3, 4]

The dipolar porphyrins, PAH and archaeal magnetite in the setting of digoxin induced sodium potassium ATPase inhibition can produce a pumped phonon system mediated Frohlich model superconducting state inducing quantal perception with nanoarchaeal sensed gravity producing the orchestrated reduction of the quantal possibilities to the macroscopic world. ALA can produce sodium potassium ATPase inhibition resulting in a pumped phonon system mediated quantal state involving dipolar porphyrins. Porphyrins by auto-oxidation can generate biophotons and are involved in quantal perception. Biophotons can mediate quantal perception. Cellular porphyrins photooxidation are involved in sensing of earth magnetic fields and low level biomagnetic fields. Porphyrins can thus contribute to quantal perception. Low level electromagnetic fields and light can induce porphyrin synthesis. Low level EMF can produce ferrochelatase inhibition as well as heme oxygenase induction contributing to heme depletion, ALA synthase induction and increased porphyrin synthesis. Light also induces ALA synthase and porphyrin synthesis. The increased porphyrin synthesized can contribute to increased quantal perception and can modulate conscious perception. The porphyrin induced biophotons and quantal fields can modulate the source from which low level EMF and photic fields were generated. Thus the porphyrin generated by extraneous low level EMF and photic fields can interact with the source of low level EMF and photic fields modulating it. Thus porphyrins can serve as a bridge between the human brain and the source of low level EMF and photic fields. This serves as a mode of communication between the human brain

and EMF storage devices like internet. The porphyrins can also serve as the source of communication with the environment. Environmental EMF and chemicals produce heme oxygenase induction and heme depletion increasing porphyrin synthesis, quantal perception and two-way communication. Thus induction of porphyrin synthesis can serve as a mechanism of communication between human brain and the environment by extrasensory perception.

The porphyrions are self replicating supramolecular organisms which forms the precursor template on which the viroids, prions and nanoarchaea originate. Stress induced template directed abiogenesis of porphyrions, prions, viroids and archaea is a continuous process and can contribute to changes in brain structure and behavior as well as disease process.

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Neanderthalic Cholesterol and Actinide Dependent Shadow Biosphere of Archaea and Viroids Indicating Cholesterol Based Abiogenesis - Evolution of the Biological Universe

Introduction

Endomyocardial fibrosis (EMF) along with the root wilt disease of coconut is endemic to Kerala with its radioactive actinide beach sands. Actinides like rutile producing intracellular magnesium deficiency due to rutile-magnesium exchange sites in the cell membrane have been implicated in the etiology of EMF.[1] Endogenous digoxin, a steroidal glycoside which functions as a membrane sodium potassium ATPase inhibitor has also been related to its etiology due to the intracellular magnesium deficiency it produces.[2] Organisms like phytoplasmas and viroids have also been demonstrated to play a role in the etiology of these diseases.[3, 4] Endogenous digoxin has been related to the pathogenesis of Schizophrenia, malignancy, metabolic syndrome x, autoimmune disease and neuronal degeneration.[2] The possibility of endogenous digoxin synthesis by actinide based primitive organism like archaea with a mevalonate pathway and cholesterol catabolism was considered.[5-7] Davies has put forward the concept of a shadow biosphere of organisms with alternate biochemistry present in earth itself.[8] An actinide dependent shadow biosphere of archaea and viroids in the above mentioned disease states is described.[6] Metal actinides in beach sands have been postulated to play a role in abiogenesis.[6] Actinide mineral like rutile, monazite and illmenite by surface metabolism would have contributed to abiogenesis.[9] A hypothesis of cholesterol as the primal prebiotic molecule synthesised on actinide surfaces with all other biomolecules arising from it and a self replicating cholesterol lipid organism as the initial life form is presented. The role of actinidic archaea in the genesis of the interstellar polycyclic aromatic hydrocarbons as well as the interstellar magnetic fields important in the evolution of the universe is hypothesized.

Materials and Methods

Informed consent of the subjects and the approval of the ethics committee were obtained for the study. The following groups were included in the study: - Endomyocardial fibrosis, Alzheimer's disease, multiple sclerosis, non-Hodgkin's lymphoma, metabolic syndrome x with cerebrovascular thrombosis and coronary artery disease, schizophrenia, autism, seizure disorder, Creutzfeldt Jakob's disease and acquired immunodeficiency syndrome. There were 10 patients in each group and each patient had an age and sex matched healthy control selected randomly from the general population. The blood samples were drawn in the fasting state before treatment was initiated. Plasma from fasting heparinised blood was used and the experimental protocol was as follows (I) Plasma+phosphate buffered saline, (II) same as I+cholesterol substrate, (III) same as II+rutile 0.1 mg/ml, (IV) same as II+ciprofloxacine and doxycycline each in a concentration of 1 mg/ml. Cholesterol substrate was prepared as described by Richmond.[10] Aliquots were withdrawn at zero time immediately after mixing and after incubation at 37 ℃ for 1 hour. The following estimations were carried out: - Cytochrome F420, free RNA, free DNA, muramic acid, polycyclic aromatic hydrocarbon, hydrogen peroxide, serotonin, pyruvate, ammonia, glutamate, cytochrome C, hexokinase, ATP synthase, HMG CoA redutase, digoxin and bile acids.[11-14] Cytochrome F420 was estimated flourimetrically (excitation wavelength 420 nm and emission wavelength 520 nm). Polycyclic aromatic hydrocarbon was estimated by measuring hydrogen peroxide liberated by using glucose reagent. The statistical analysis was done by ANOVA.

Results

The parameters checked as indicated above were: - cytochrome F420, free RNA, free DNA, muramic acid, polycyclic aromatic hydrocarbon, hydrogen peroxide, serotonin, pyruvate, ammonia, glutamate, cytochrome C, hexokinase, ATP synthase, HMG CoA reductase, digoxin and bile acids. Plasma of control subjects showed increased levels of the above mentioned parameters with after incubation for 1 hour and addition of cholesterol substrate resulted in still further significant increase in these parameters. The plasma of patients showed similar results but the extent of increase was more. The addition of antibiotics to the control plasma caused a decrease in all the parameters while addition of rutile increased their levels. The addition of antibiotics to the patient's plasma caused a decrease in all the parameters while addition of rutile increased their levels but the extent of change was more in patient's sera as compared to controls. The results are expressed in tables 1-7 as percentage change in the parameters after 1 hour incubation as compared to the values at zero time.

Table 1. *Effect of rutile and antibiotics on cytochrome F420 and muramic acid.*

Group	CYT F420 % (Increase with Rutile)		CYT F420 % (Decrease with Doxy+Cipro)		Muramic acid % change (Increase with Rutile)		Muramic acid % change (Decrease with Doxy+Cipro)	
	Mean	±SD	Mean	±SD	Mean	±SD	Mean	±SD
Normal	4.48	0.15	18.24	0.66	4.45	0.14	18.25	0.72
Schizo	23.24	2.01	58.72	7.08	23.01	1.69	59.49	4.30
Seizure	23.46	1.87	59.27	8.86	22.67	2.29	57.69	5.29
AD	23.12	2.00	56.90	6.94	23.26	1.53	60.91	7.59
MS	22.12	1.81	61.33	9.82	22.83	1.78	59.84	7.62
NHL	22.79	2.13	55.90	7.29	22.84	1.42	66.07	3.78
DM	22.59	1.86	57.05	8.45	23.40	1.55	65.77	5.27
AIDS	22.29	1.66	59.02	7.50	23.23	1.97	65.89	5.05
CJD	22.06	1.61	57.81	6.04	23.46	1.91	61.56	4.61
Autism	21.68	1.90	57.93	9.64	22.61	1.42	64.48	6.90
EMF	22.70	1.87	60.46	8.06	23.73	1.38	65.20	6.20
F value	306.749		130.054		391.318		257.996	
P value	< 0.001		< 0.001		< 0.001		< 0.001	

Table 2. *Effect of rutile and antibiotics on free RNA and DNA.*

Group	DNA % change (Increase with Rutile)		DNA % change (Decrease with Doxy+Cipro)		RNA % change (Increase with Rutile)		RNA % change (Decrease with Doxy+Cipro)	
	Mean	±SD	Mean	±SD	Mean	±SD	Mean	±SD
Normal	4.37	0.15	18.39	0.38	4.37	0.13	18.38	0.48
Schizo	23.28	1.70	61.41	3.36	23.59	1.83	65.69	3.94
Seizure	23.40	1.51	63.68	4.66	23.08	1.87	65.09	3.48
AD	23.52	1.65	64.15	4.60	23.29	1.92	65.39	3.95
MS	22.62	1.38	63.82	5.53	23.29	1.98	67.46	3.96
NHL	22.42	1.99	61.14	3.47	23.78	1.20	66.90	4.10
DM	23.01	1.67	65.35	3.56	23.33	1.86	66.46	3.65
AIDS	22.56	2.46	62.70	4.53	23.32	1.74	65.67	4.16
CJD	23.30	1.42	65.07	4.95	23.11	1.52	66.68	3.97
Autism	22.12	2.44	63.69	5.14	23.33	1.35	66.83	3.27
EMF	22.29	2.05	58.70	7.34	22.29	2.05	67.03	5.97
F value	337.577		356.621		427.828		654.453	
P value	< 0.001		< 0.001		< 0.001		< 0.001	

Table 3. *Effect of rutile and antibiotics on HMG CoA reductase and ATP synthase.*

Group	HMG CoA R % change (Increase with Rutile)		HMG CoA R % change (Decrease with Doxy+Cipro)		ATP synthase % (Increase with Rutile)		ATP synthase % (Decrease with Doxy+Cipro)	
	Mean	**±SD**	**Mean**	**±SD**	**Mean**	**±SD**	**Mean**	**±SD**
Normal	4.30	0.20	18.35	0.35	4.40	0.11	18.78	0.11
Schizo	22.91	1.92	61.63	6.79	23.67	1.42	67.39	3.13
Seizure	23.09	1.69	61.62	8.69	23.09	1.90	66.15	4.09
AD	23.43	1.68	61.68	8.32	23.58	2.08	66.21	3.69
MS	23.14	1.85	59.76	4.82	23.52	1.76	67.05	3.00
NHL	22.28	1.76	61.88	6.21	24.01	1.17	66.66	3.84
DM	23.06	1.65	62.25	6.24	23.72	1.73	66.25	3.69
AIDS	22.86	2.58	66.53	5.59	23.15	1.62	66.48	4.17
CJD	22.38	2.38	60.65	5.27	23.00	1.64	66.67	4.21
Autism	22.72	1.89	64.51	5.73	22.60	1.64	66.86	4.21
EMF	22.92	1.48	61.91	7.56	23.37	1.31	63.97	3.62
F value	319.332		199.553		449.503		673.081	
P value	< 0.001		< 0.001		< 0.001		< 0.001	

Table 4. *Effect of rutile and antibiotics on digoxin and bile acids.*

Group	Digoxin (ng/ml) (Increase with Rutile)		Digoxin (ng/ml) (Decrease with Doxy+Cipro)		Bile Acids % change (Increase with Rutile)		Bile Acids % change (Decrease with Doxy+Cipro)	
	Mean	**±SD**	**Mean**	**±SD**	**Mean**	**±SD**	**Mean**	**±SD**
Normal	0.11	0.00	0.054	0.003	4.29	0.18	18.15	0.58
Schizo	0.55	0.06	0.219	0.043	23.20	1.87	57.04	4.27
Seizure	0.51	0.05	0.199	0.027	22.61	2.22	66.62	4.99
AD	0.55	0.03	0.192	0.040	22.12	2.19	62.86	6.28
MS	0.52	0.03	0.214	0.032	21.95	2.11	65.46	5.79
NHL	0.54	0.04	0.210	0.042	22.98	2.19	64.96	5.64
DM	0.47	0.04	0.202	0.025	22.87	2.58	64.51	5.93
AIDS	0.56	0.05	0.220	0.052	22.29	1.47	64.35	5.58
CJD	0.53	0.06	0.212	0.045	23.30	1.88	62.49	7.26
Autism	0.53	0.08	0.205	0.041	22.21	2.04	63.84	6.16
EMF	0.51	0.05	0.213	0.033	23.41	1.41	58.70	7.34
F value	135.116		71.706		290.441		203.651	
P value	< 0.001		P < 0.001		< 0.001		< 0.001	

Table 5. *Effect of rutile and antibiotics on pyruvate and hexokinase.*

Group	Pyruvate % change (Increase with Rutile)		Pyruvate % change (Decrease with Doxy+Cipro)		Hexokinase % change (Increase with Rutile)		Hexokinase % change (Decrease with Doxy+Cipro)	
	Mean	**±SD**	**Mean**	**±SD**	**Mean**	**±SD**	**Mean**	**±SD**
Normal	4.34	0.21	18.43	0.82	4.21	0.16	18.56	0.76
Schizo	20.99	1.46	61.23	9.73	23.01	2.61	65.87	5.27
Seizure	20.94	1.54	62.76	8.52	23.33	1.79	62.50	5.56
AD	22.63	0.88	56.40	8.59	22.96	2.12	65.11	5.91
MS	21.59	1.23	60.28	9.22	22.81	1.91	63.47	5.81
NHL	21.19	1.61	58.57	7.47	22.53	2.41	64.29	5.44
DM	20.67	1.38	58.75	8.12	23.23	1.88	65.11	5.14
AIDS	21.21	2.36	58.73	8.10	21.11	2.25	64.20	5.38
CJD	21.07	1.79	63.90	7.13	22.47	2.17	65.97	4.62
Autism	21.91	1.71	58.45	6.66	22.88	1.87	65.45	5.08
EMF	22.29	2.05	62.37	5.05	21.66	1.94	67.03	5.97
F value	321.255		115.242		292.065		317.966	
P value	< 0.001		< 0.001		< 0.001		< 0.001	

Table 6. *Effect of rutile and antibiotics on hydrogen peroxide and delta amino levulinic acid.*

Group	H_2O_2 % (Increase with Rutile)		H_2O_2 % (Decrease with Doxy+Cipro)		ALA % (Increase with Rutile)		ALA % (Decrease with Doxy+Cipro)	
	Mean	**±SD**	**Mean**	**±SD**	**Mean**	**±SD**	**Mean**	**±SD**
Normal	4.43	0.19	18.13	0.63	4.40	0.10	18.48	0.39
Schizo	22.50	1.66	60.21	7.42	22.52	1.90	66.39	4.20
Seizure	23.81	1.19	61.08	7.38	22.83	1.90	67.23	3.45
AD	22.65	2.48	60.19	6.98	23.67	1.68	66.50	3.58
MS	21.14	1.20	60.53	4.70	22.38	1.79	67.10	3.82
NHL	23.35	1.76	59.17	3.33	23.34	1.75	66.80	3.43
DM	23.27	1.53	58.91	6.09	22.87	1.84	66.31	3.68
AIDS	23.32	1.71	63.15	7.62	23.45	1.79	66.32	3.63
CJD	22.86	1.91	63.66	6.88	23.17	1.88	68.53	2.65
Autism	23.52	1.49	63.24	7.36	23.20	1.57	66.65	4.26
EMF	23.29	1.67	60.52	5.38	22.29	2.05	61.91	7.56
F value	380.721		171.228		372.716		556.411	
P value	< 0.001		< 0.001		< 0.001		< 0.001	

Table 7. *Effect of rutile and antibiotics on PAH and serotonin.*

Group	PAH % (Increase with Rutile)		PAH % (Decrease with Doxy+Cipro)		5 HT % change (Increase with Rutile)		5 HT % change (Decrease with Doxy+Cipro)	
	Mean	±SD	Mean	±SD	Mean	±SD	Mean	±SD
Normal	4.41	0.15	18.63	0.12	4.34	0.15	18.24	0.37
Schizo	21.88	1.19	66.28	3.60	23.02	1.65	67.61	2.77
Seizure	22.29	1.33	65.38	3.62	22.13	2.14	66.26	3.93
AD	23.66	1.67	65.97	3.36	23.09	1.81	65.86	4.27
MS	22.92	2.14	67.54	3.65	21.93	2.29	63.70	5.63
NHL	23.81	1.90	66.95	3.67	23.12	1.71	65.12	5.58
DM	24.10	1.61	65.78	4.43	22.73	2.46	65.87	4.35
AIDS	23.43	1.57	66.30	3.57	22.98	1.50	65.13	4.87
CJD	23.70	1.75	68.06	3.52	23.81	1.49	64.89	6.01
Autism	22.76	2.20	67.63	3.52	22.79	2.20	64.26	6.02
EMF	22.28	1.52	64.05	2.79	22.82	1.56	64.61	4.95
F value	403.394		680.284		348.867		364.999	
P value	< 0.001		< 0.001		< 0.001		< 0.001	

Discussion

There was increase in cytochrome F420 indicating archaeal growth. The archaea can synthesize and use cholesterol as a carbon and energy source.[15, 16] The archaeal origin of the enzyme activities was indicated by antibiotic induced suppression. The study indicates the presence of actinide based archaea with an alternate actinide based enzymes or metalloenzymes in the system as indicated by rutile induced increase in enzyme activities.[17] There was also an increase in archaeal HMG CoA reductase activity indicating increased cholesterol synthesis by the archaeal mevalonate pathway. The archaeal beta hydroxyl steroid dehydrogenase activity indicating digoxin synthesis and archaeal cholesterol hydroxylase activity indicating bile acid synthesis were increased.[7] The archaeal cholesterol oxidase activity was increased resulting in generation of pyruvate and hydrogen peroxide.[16] The pyruvate gets converted to glutamate and

ammonia by the GABA shunt pathway. The archaeal aromatization of cholesterol generating PAH, serotonin and dopamine was also detected.[18] The archaeal glycolytic hexokinase activity and archaeal extracellular ATP synthase activity were increased. The archaea can undergo magnetite and calcium carbonate mineralization and can exist as calcified nanoforms.[19] There was an increase in free RNA indicating self replicating RNA viroids and free DNA indicating generation of viroid complementary DNA strands by archaeal reverse transcriptase activity. The actinides modulate RNA folding and catalyse its ribozymal action. Digoxin can cut and paste the viroidal strands by modulating RNA splicing generating RNA viroidal diversity. The viroids are evolutionarily escaped archaeal group I introns which have retrotransposition and self splicing qualities.[20] Archaeal pyruvate can produce histone deacetylase inhibition resulting in endogenous retroviral (HERV) reverse transcriptase and integrase expression. This can integrate the RNA viroidal complementary DNA into the noncoding region of eukaryotic noncoding DNA using HERV integrase as has been described for borna and ebola viruses.[21] The noncoding DNA is lengthened by integrating RNA viroidal complementary DNA with the integration going on as a continuing event. The archaea genome can also get integrated into human genome using integrase as has been described for trypanosomes.[22] The integrated viroids and archaea can undergo vertical transmission and can exist as genomic parasites.[21, 22] This increases the length and alters the grammar of the noncoding region producing memes or memory of acquired characters.[23] The viroidal complementary DNA can function as jumping genes producing a dynamic genome important in storage of synaptic information, HLA gene expression and developmental gene expression. The RNA viroids can regulate mRNA function by RNA interference.[20] The phenomena of RNA interference can modulate T cell and B cell function,

insulin signaling lipid metabolism, cell growth and differentiation, apoptosis, neuronal transmission and euchromatin/heterochromatin expression.

The presence of muramic acid, HMG CoA reductase and cholesterol oxidase activity inhibited by antibiotics indicates the presence of bacteria with mevalonate pathway. The bacterial with mevalonate pathway include streptococcus, staphylococcus, actinomycetes, listeria, coxiella and borrelia.[24] The bacteria and archaea with mevalonate pathway and cholesterol catabolism had a evolutionarily advantage and constitutes the isoprenoidal clade organism with the archaea evolving into mevalonate pathway gram positive and gram negative organism through horizontal gene transfer of viroidal and virus genes.[25] The isoprenoidal clade prokaryotes develop into other groups of prokaryotes via viroidal/virus as well as eukaryotic horizontal gene transfer producing bacterial speciation.[26] The RNA viroids and its complementary DNA developed into cholesterol enveloped RNA and DNA viruses like herpes, retrovirus, influenza virus, borna virus, cytomegalo virus and Ebstein Barr virus by recombining with eukaryotic and human genes resulting in viral speciation. Bacterial and viral species are ill defined and fuzzy with all of them forming one common genetic pool with frequent horizontal gene transfer and recombination. Thus the multi and unicellular eukaryote with its genes serves the purpose of prokaryotic and viral speciation. The multicellular eukaryote developed so that their endosymbiotic archaeal colonies could survive and forage better. The multicellular eukaryotes are like bacterial biofilms. The archaea and bacteria with a mevalonate pathway uses the extracellular RNA viroids and DNA viroids for quorum sensing and in the generation of symbiotic biofilm like structures which develop into multicellular eukaryotes.[27, 28] The endosymbiotic archaea and bacteria with mevalonate pathway still uses the RNA viroids and DNA viroids for the regulation of multicellular eukaryote. Pollution is induced by the primitive nanoarchaea and mevalonate pathway

bacteria synthesized PAH and methane leading on to redox stress. Redox stress leads to sodium potassium ATPase inhibition, inward movement of plasma membrane cholesterol, defective SREBP sensing, increased cholesterol synthesis and nanoarchaeal/mevalonate pathway bacterial growth.[29] Redox stress leads on to viroidal and archaeal multiplication. Redox stress can also lead to HERV reverse transcriptase and integrase expression. The noncoding DNA is formed of integrating RNA viroidal complementary DNA and archaea with the integration going on as a continuing event. The archaeal pox like dsDNA virus forms evolutionarily the nucleus. The integrated viroidal, archaeal and mevalonate pathway bacterial sequences can undergo vertical transmission and can exist as genomic parasites. The genomic integrated archaea, mevalonate pathway bacteria and viroids form a genomic reserve of bacteria and viruses which can recombine with human and eukaryotic genes producing bacterial and viral speciation. The change in the length and grammar of the noncoding region produces eukaryotic speciation and individuality.[30] The integration of nanoarchaea, mevalonate pathway prokaryotes and viroids in to the eukaryotic and human genome produces a chimera which can multiply producing biofilm like multicellular structures having a mixed archaeal, viroidal, prokaryotic and eukaryotic characters which is a regression from the multicellular eukaryotic tissue. This results in a new neuronal, metabolic, immune and tissue phenotype leading to human disease.

The archaea and viroids can regulate the nervous system including the NMDA/GABA thalamo-cortico-thalamic pathway mediating conscious perception.[2, 31] NMDA/GABA receptors can be modulated by digoxin induced calcium oscillations resulting NMDA/GAD activity induction, PAH increasing NMDA activity and inducing GAD as well as viroid induced RNA interference.[2] The cholesterol ring oxidase generated pyruvate can be converted by the GABA shunt pathway to glutamate and GABA. The dipolar PAH and

archaeal magnetite in the setting of digoxin induced sodium potassium ATPase inhibition can produce a pumped phonon system mediated Frohlich model superconducting state inducing quantal perception with nanoarchaeal sensed gravity producing the orchestrated reduction of the quantal possibilities to the macroscopic world.[2, 31] The archaea can regulate limbic lobe transmission with archaeal cholesterol aromatase/ring oxidase generated norepinephrine, dopamine, serotonin and acetyl choline.[18] The higher degree of integration of the archaea into the genome produces increased digoxin synthesis producing right hemispheric dominance and lesser degree producing left hemispheric dominance.[2] The increased integration of archaea into the neuronal genome can produce increased cholesterol oxidase and aromatase mediated monoamine and NMDA transmission producing schizophrenia and autism. Archaea and RNA viroid can bind the TLR receptor induce NFKB producing immune activation and cytokine TNF alpha secretion. The archaeal DXP and mevalonate pathway metabolites can bind γδ TCR and digoxin induced calcium signaling can activate NFKB producing chronic immune activation.[2, 32] The archaea and viroid induced chronic immune activation and generation of superantigens can lead on to autoimmune disease. Archaea, viroids and digoxin can induce the host AKT PI3K, AMPK, HIF alpha and NFKB producing the Warburg metabolic phenotype.[33] The increased glycolytic hexokinase activity, decrease in blood ATP, leakage of cytochrome C, increase in serum pyruvate and decrease in acetyl CoA indicates the generation of the Warburg phenotype. There is induction of glycolysis, inhibition of PDH activity and mitochondrial dysfunction resulting in inefficient energetics and metabolic syndrome. The archaea and viroid generated cytokines can lead to TNF alpha induced insulin resistance and metabolic syndrome x. The accumulated pyruvate enters the GABA shunt pathway and is converted to citrate which is acted upon by citrate lyase and converted to acetyl CoA, used for cholesterol synthesis.[33] The

pyruvate can be converted to glutamate and ammonia which is oxidised by archaea for energy needs. The increased cholesterol substrate leads to increased archaeal growth and digoxin synthesis leading to metabolic channeling to the mevalonate pathway. The archaeal bile acids are steroidal hormones which can bind GPCR and modulate D2 regulating the conversion of T4 to T3 which activates uncoupling proteins, can activate NRF ½ inducing NQO1, GST, HOI reducing redox stress, can bind FXR regulating insulin receptor sensitivity and bind PXR inducing the bile acid shunt pathway of cholesterol detoxification.[34] The archaea and viroid induced monocyte activation and Warburg phenotype induced increased cholesterol synthesis leads to atherogenesis. The Warburg phenotype induced increased mitochondrial PT pore hexokinase, archaeal PAH and viroid induced RNA interference can lead on to malignant transformation. The digoxin and PAH induced increased intracellular calcium can lead to PT pore dysfunction, cell death and neuronal degeneration.[2] The archaeal cholesterol catabolism can deplete the cell membranes of cholesterol resulting in organelle dysfunction and degeneration. The RNA viroids can recombine with HERV sequences and get encapsulated in microvesicles contributing to the retroviral state. The prion protein conformation is modulated by RNA viroid binding producing prion disease. The archaeal digoxin and rutile induced magnesium depletion can lead MPS deposition and produce EMF, CCP, MNG and mucoid angiopathy[2].

The metal actinides provide radiolytic energy, catalysis for oligomer formation and provide a coordinating ion for metalloenzymes all important in abiogenesis.[6] The metal actinide surfaces would by surface metabolism generate acetate which could get converted to acetyl CoA and then to cholesterol which functions as the primal prebiotic molecule self organizing into self replicating supramolecular systems, the lipid organism.[8, 9, 35] Cholesterol by radiolysis by actinides would have formed PAH generating PAH aromatic organism.[8]

Cholesterol radiolysis would generate pyruvate which would get converted to amino acids, sugars, nucleotides, porphyrins, fatty acids and TCA acids. Anastase and rutile surfaces can produce polymerization of amino acids, isoprenyl residues, PAH and nucleotides to generate the initial lipid organism, PAH organism, prions and RNA viroids which would have symbiosed to generate the archaeal protocell. The archaea evolved into gram negative and gram positive bacteria with a mevalonate pathway which had a evolutionary advantage and the symbiosis of archaea with gram negative organism generated the eukaryotic cell.[36] The data supports the persistence of an actinide and cholesterol based shadow biosphere which throws light on the actinide based origin of life and cholesterol as the premier prebiotic molecule.

The archaea can synthesise magnetite by biomineralization. The archaeal cholesterol catabolism can generate PAH. The archaea can exist as nanoarchaea and can have calcified nanoforms. The actinidic magnetotactic nanoarchaea and its secreted PAH organisms are extremophiles and survive in the interstellar space and can contribute to the interstellar grains and magnetic fields which play a role in the formation of the galaxies and star systems.[37] The cosmic dust grains occupy the intergalactic space and are thought to be formed of magnetotactic bacteria identified according to their spectral signatures. According to the Hoyle's hypothesis, the cosmic dust magnetotactic bacteria play a role in the formation of the intergalactic magnetic field. A magnetic field equal in strength to about one millionth part of the magnetic field of earth exists throughout much of our galaxy. The magnetic files can be used to trace the spiral arms of the galaxy following a pattern of field lines that connect young stars and dust in which new stars are formed at a rapid rate. Studies have shown that a fraction of the dust particles have elongated shape similar to bacilli and they are systematically lined up in our galaxy. Moreover the direction of alignment is such that the long axes of the dust tend to be at right angles to the

direction of the galactic magnetic field at every point. Magnetotactic bacteria have the property to affect the degree of alignment that is observed. The fact that the magnetotactic bacteria appear to be connected to the magnetic field lines that thread through the spiral arms of the galaxy connecting one region of star formation to another support a role for them in star formation and in the mass distribution and rotation of stars. The nutrient supply for a population of interstellar bacteria comes from mass flows out of supernovas populating the galaxy. Giants arising in the evolution of such stars experience a phenomenon in which material containing nitrogen, carbon monoxide, hydrogen, helium, water and trace elements essential for life flows continuously outward into space. The interstellar bacteria need liquid water. Water exists only as vapour or solid in the interstellar space and only through star formation leading to associated planets and cometary bodies can there be access to liquid water. To control conditions leading to star formation is of paramount importance in cosmic biology. The rate of star formation is controlled by two factors: Too high a rate of star formation produces a destructive effect of UV radiation and destroys cosmic biology. Star formation as stated before produces water crucial for bacterial growth. Cosmic biology of magnetotactic bacteria and star formation are thus closely interlinked. Systems like solar systems do not arise in random condensation of blobs of interstellar gas. Only by a rigorous control of rotation of various parts of the system would galaxies and solar system evolved. The key to maintaining control over rotation seems to lie in the intergalactic magnetic field as indeed the whole phenomena of star formation. The intergalactic magnetic fields owes its origin to the lining up of magnetotactic bacteria and the cosmic biology of interstellar bacteria can prosper only by maintaining a firm grip on the interstellar magnetic field and hence on the rate of star formation and type of star system produced. This points to a cosmic intelligence or brain capable of computation, analysis and exploration of the

universe at large - of magnetotactic bacterial networks. The origin of life on earth according to the Hoyle's hypothesis would be by seeding of bacteria from the outer intergalactic space. Comets carrying microorganisms would have interacted with the earth. A thin skin of graphitized material around a single bacteria or clumps of bacteria can shield the interior from destruction by UV light. The sudden surge and diversification of species of plants and animals and their equally sudden extinction has seen from fossil records point to sporadic evolution produced by induction of fresh cometary genes with the arrival of each major new crop of comets.[38, 39] The interstellar PAH aromatic organism is formed from nanoarchaeal cholesterol catabolism. The PAH and cholesterol are the interconvertible primal prebiotic molecules. PAH aromatic organism and nanoarchaeal magnetite can have a wave particle existence and bridge the world of bosons and fermions. The nanoarchaea can form biofilms and the PAH aromatic organism can form a molecular quantum computing cloud in the biofilm which forms a interstellar intelligence regulating the formation of star systems and galaxies. The magnetite loaded nanoarchaeal biofilms and PAH aromatic organism quantal computing cloud can bridge the wave particle world functioning as the anthropic observer sensing gravity which orchestrates the reduction of the quantal world of possibilities in to the macroscopic world. The actinide based nanoarchaea can regulate the earth's carbon cycle by methanogenesis, nitrogen cycle by ammonia oxidation and rain formation by contributing the seeding nucleus. The earth's temperature and global warming and cooling are regulated by nanoarchaeal synthesized PAH from cholesterol and methanogenesis. The increased nanoarchaeal growth in ocean beds and soil leads to increased methane production and movement of the earth's crust producing tsunamis and massive earthquake leading to catastrophic mass extinction.[40] The eternal nanoarchaea survive and start the cycle of evolution

once more. The actinide based nanoarchaea regulates the human system and biological universe.

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4

The Porphyrions and the Quantal Civilisation

The global warming and low level of EMF pollution induces the enzyme heme oxygenase (HO1). HO1 converts heme to bilirubin and biliverdin. This leads to a heme deficiency state and stimulation of ALA synthase the rate limiting enzyme of porphyrin synthesis. The body metabolism gets channelled as a whole to porphyrin synthesis. The deficiency of heme results in cytochrome C oxidase dysfunction and mitochondrial dysfunction. Porphyrin photo-oxidation generated free radicals induce HIF alpha and glycolysis. This leads onto the accumulation of pyruvate which enters the GABA shunt pathway generating succinyl CoA and glycine, the substrates for porphyrin synthesis.

The porphyrin arrays which can function as a supramolecular organism the self replicatory features. Porphyrin arrays can form templates on which other porphyrin arrays can form. Such self replicatory supramolecular porphyrin arrays can be called as porphyrions. The stress of global warming converts the body into a porphyrion colony or network.

The global warming and low level of EMF pollution related endosymbiotic archaeal growth due to induction of porphyrin synthesis and formation of nanoarchaea on porphyrin templates leads to neanderthalisation of human population as a symbiotic process. The porphyrins can perceive low level of EMF producing prefrontal cortex atrophy and cerebellar hypertrophy. This results in alteration in brain function and structure as well as cognition. Thus stress induced HO1 induction due to global warming, ice age phenomena or low level of EMF pollution leads to neanderthalisation of the human brain, metabolonomics and body.

The porphyrins have got macroscopic wave particle existence. The porphyrins have also magnetic properties because of the iron centre. The porphyrin arrays can exist as quantal wave arrays as part of quantal form

functioning as quantal computers capable of information storage and self replication. This could be a form of quantal life. The human consciousness depends upon three factors: perceptual synchronization, focused attention and working memory. Gravitational waves could form the basis of consciousness. Similarly, the human unconscious could be structured by anti-gravity.

Studies on normal conscious individuals, comatose patients and disorders of consciousness like schizophrenia and autism show changes in cerebrospinal fluid porphyrin levels. Porphyrions can modulate conscious perception. Porphyrions can grow in extremes of temperature, space and hypergravity situation.[1-3] This led to the plausibility of gravity sensing brain porphyrions mediating consciousness and also consciousness as a feature of gravitational forces. Gravity extends as gravitational waves made up of possible gravitons throughout the universe.[4] Gravitational waves can form pressure waves which can create gravitational sounds. These thought sounds can undergo soni-luminescence creating photons and electromagnetic radiation the basis of the world of matter. This can lead onto the generation of tetrapyrrole rings from gravitational fields generating porphyrin arrays in-situ. This is exemplified by the religious symbols of lotus of brahma and swasthika.

Conscious perception involves three factors - perceptual synchronization, focused attention mediated by the reticular thalamic nucleus and the thalamo-cortico-thalamic reticular reverberatory circuit.[5] These structures are modulated by gravity as demonstrated by the classical pyramidal syndrome where the tone is more in the anti-gravity groups of muscles. Gravitational attraction by its nature can modulate perceptual binding and focused attention.[6] Gravitation can also mediate working memory involving a fraction of a second structured in the reticular - thalamo-cortico-thalamic - reticular reverberatory circuit formation. The reticular formation can be considered as a primitive

archaeal colony network of hypergravity sensing archaea of possible exobiologic origin.[7] Gravity can thus function as a thought field permeating the whole universe as gravitational waves made up of possible gravitons which are massless particles travelling at the speed of light. The gravitational waves form the sub-quantal field from which quarks, fermions, bosons, electrons, neutrons, positrons and photons can pop up as particles from their waveforms embedded in the sea of gravitational waves with possible gravitons of the thought field functioning as the ubiquitous observer. Thus the thought field of gravity and the matter is unified. Thought underlies the world of matter.[8]

Consciousness depends on three parameters- working memory, perceptual synchronization and focused attention.[5] This theory was put forward by Crick who localized consciousness into the reticular- thalamo-cortico-thalamic - reticular pathway. Gravity would form the basis of consciousness. Perceptual synchronization and focused attention would depend upon gravitational attraction which are ideal forces to create these two phenomena. This also would create a form of working memory in the flow of nerve impulses in the reticular - thalamo-cortico-thalamic - reticular reverberatory circuit. The brain functions as a quantum computer and we sense the multitudinal quantal possibilities in the world. The dipolar archaeal magnetite in the setting of endogenous digoxin induced membrane sodium potassium ATPase inhibition can create a pumped phonon system mediating quantal perception. When one of the possibilities reaches one graviton criteria it reaches conscious perception. Gravity thus can be considered as a thought field or consciousness field permeating throughout the whole universe. Gravitational waves can form pressure waves which can create gravitational sounds. These thought sounds can undergo soni-luminescence creating photons and electromagnetic radiation the basis of the world of matter. Soni-luminescence can create matter out of

gravitational sounds. Thus the thought field can create the matter. Mind and matter can be unified.

Gravity is a vector force that has magnitude and direction at each point of space. Gravity loading is directed towards the centre of the earth. The theory of gravity says that every object in the universe attracts every other object with a force proportional to its mass. Gravitational force exists throughout the universe and is formed of gravitational waves. The gravitational waves are made up of possible particles called gravitons and travels with the speed of light. Gravity plays an important role in the creation of the universe as described by Stephen Hawking.[4] Hawking postulated that if the total energy of the universe must always remain zero and it costs energy to create a body the whole universe cannot be created out of nothing. That is why there should be a law like gravity. Because gravity is attractive gravitational energy is negative. One has to do work to separate gravitationally bound systems like earth and moon. This negative energy can balance the positivity energy needed to create matter. On the scale of the entire universe the positive energy of matter can be balanced by negative gravitational energy and so there is no restriction on the creation of the whole universe. Gravity is described by Hawking as a curvature in space-time. Le Sage in his theory of gravity describes it as gravitational waves formed of ultima mundae corpuscles which impinge on matter and penetrate it.[6] Matter shields each other against gravity producing an attraction force. Gravitational waves and particles penetrate all matter and interact with the subatomic particles. Quantum gravitational waves is possibly the sub-quantal potential of Bohm from which all the particles like electron, neutrons, positrons come out and go as pertuberations. The mass of a particle depends upon its interaction with the Higgs field and exchange of Bosons with it. Gravitons are a form of Bosons with reverse spin. They can be considered as extending throughout the universe and are mass less. Gravity and light travel with the same speed as thought. Gravity can form the basis of human thought.

Human thought fields according to Bohm underlies the sub-quantal potential from which all particles emanate.[8]

The gravitational waves or thought fields are structured in the brain by the reticular formation porphyrion network. The gravitational waves can thus function as a thought field or sub-quantal field on which the particles like neutrons, electrons, bosons, quarks, fermions can pop in and out from waves to particles. The thought field of gravity functions as the universal observer and brings the particulate world of matter into existence. Gravitational waves can form pressure waves which can create gravitational sounds. These thought sounds can undergo soni-luminescence creating photons and electromagnetic radiation the basis of the world of matter. Thus the thought field of gravity and the matter is unified. Thought underlies the world of matter.[8]

The cerebellum is the site of the unconscious brain. Cerebellum is concerned with automatic acts. Robotic behaviour as seen in autism is localized to cerebellum. The cerebellum is concerned with extrasensory perception, magical acts, poltergeist phenomena and spiritual acts. The cerebellum can be described as the part of the collective unconscious. Cerebellar lesions also manifest with motor phenomenon. Lesions of the cerebellum manifest with axial and appendicular ataxia. This gives a sense of antigravity feeling. Cerebellum is concerned with the tone of the antigravity muscles. The antigravity fields and waves are sensed by the cerebellum. Cerebellar lesions manifest with cognitive dysfunction described as the cerebellar cognitive affective disorder. Cerebellar dysfunction is described in autism and schizophrenia. Studies on normal conscious individuals and disorders of consciousness like schizophrenia and autism show changes in cerebrospinal fluid porphyrin levels. Porphyrions can modulate conscious perception. Porphyrions are extremophiles and can grow in extremes of temperature, space and antigravity situation.[1-3] This led to the

plausibility of antigravity wave sensing brain porphyrions mediating the functions of the unconscious brain.

Dark matter and dark energy is the repulsive antigravity force that permeates the entire universe opposing gravity. It is responsible for the missing mass of the universe and constitutes 70 percent of the mass of the universe. It is responsible for the expansion of the universe. Antigravity exists as possible antigravity waves. This forms part of quantum vacuum were matter and anti-matter particles and gravity and antigravity particles meet and annihilate each other. This gives rise to the phenomenon of zero point energy or vacuum energy which drives the creation of the universe.

Just as gravity forms the conscious mind antigravity forms the unconscious mind pervading the universe as a whole. All forms of the universe are sustained by dark energy which can be called as prana, chi and ki. The dark energy permeates both animate and inanimate objects. When the dark energy recedes from an organ it loses its function. The dark energy is the cause of the function of the body and mind. At death the dark energy leaves the body and mixes with that of the universe. Our growth as a human body is against gravity and is an antigravity phenomenon. Levitation is also an antigravity phenomenon. The antigravity or dark energy or dark matter exists as antigravity waves. This forms the unconscious mind.

The cerebellum is concerned with motor programming and memory and robotic acts which do not reach conscious function. The cerebellum is concerned with cognition. The cerebellum plays a role in unconscious motor acts, extrasensory perception and quantal perception. The prefrontal cortex is concerned with executive memory, logic, reasoning and judgment. Thus the reticular formation forms the bridge between the conscious and unconscious parts of the brain. Reticular formation is a primitive neural network. The

dentrites and axons forming the bridges of the neural network can be compared to a network of porphyrions. The brain reticular formation can be compared to a primitive porphyrion colony network inhabiting the CNS from one end to other. The porphyrions being extremophiles would have evolved in the outer space in hypergravity situations and reached the earth by meteoric impacts producing the seeding of life on earth. The reticular formation and its connections form the basis of gravitational action in the brain.

Porphyrions can grow in hypergravity and antigravity and are extremophiles.[2, 3] Gravity may thus involved in bacterial panspermia and exobiology with porphyrions as the prime example.[3] Studies on effects of low gravity in space show drastic effects in human brain. Nerve cells need gravity to grow and function properly. The lack of gravity affects neuronal migration and produces microcephaly. The dendritic tree in the absence of gravity looks like as if it has been stripped off all branches. Gravity structures the brain. Gravity can modulate the pyramidal and extrapyramidal syndrome. Rigidity is more in the muscles acting on gravity. Gravity can modulate cerebellar hypotonia. Gravity can also affect conscious perception. The syndrome of G-LOC is described in fighter pilots exposed to high gravity field chambers. They have features of near-death experience with godly visions, meeting dead relatives, seeing hallucinatory lights and tunnelling effect.

Cortical and cerebellar lesions produce different clinical signs. Cortical lesions lead to spasticity and antigravity effects. Cerebral cortex is the basis of conscious perception. When the cerebral cortex is damaged antigravity effects take over. An antigravity force opposed to gravity in the universe has been described. Cerebellar lesions lead onto hypotonia, ataxia and a levitationary effect which can be considered as antigravity. Gravity structures the brain and can be considered to be a thought field which forms the basis of consciousness

and creation of matter. Gravitational waves unite mind and matter and form the substratum of it. Gravity and light travel with the same speed as thought. Gravity can form the basis of human thought. Human thought fields according to Bohm underlies the sub-quantal potential from which all particles emanate.[8] Thought fields include gravitational waves which form consciousness and anti-gravitational waves which forms the unconscious brain.

The unconscious mind is localised in the cerebellum and brain stem. The cerebellum has got a cognitive function and disorders of cerebellum presents as cerebellar cognitive affective disorder. The cerebellar motor disorder presents as ataxia and has got an antigravity component. The cerebellum modulates the tone of the antigravity muscles. The cerebellum is responsible for learned motor programmes, robotic acts, magical acts, hypnotism, the paranormal, extrasensory perception and is involved in autism and schizophrenia. The cerebellum is the site for antigravity or dark energy localization in the brain. It is the site of the unconscious mind or the collective unconscious. This is in comparison to the cerebral cortex which is the site of conscious perception and localization of gravitational forces. Anatomical, physiological and functional neuroimaging studies suggest that the cerebellum participates in the organization of higher order function. Behavioural changes were present in patients with lesions involving the posterior lobe of the cerebellum and the vermis. These changes were characterized by impairment in executive functions, working memory, spatial cognition, affective behaviour and language deficits. This is called the cerebellar cognitive affective disorders and is characterized by changes in the function of the unconscious brain.[8]

Porphyrions are extremophiles and can grow in extremes of temperature, space and hypergravity and antigravity situation.[1] Actinides have a role in abiogenesis.[2] This led to the plausibility of antigravity and hypergravity sensing

brain porphyrions mediating consciousness and the unconscious brain. The porphyrions in the cerebellum can sense dark energy and dark matter just as it perceives gravity. This led to the possibility of exobiologic porphyrions which are paleospermic in origin contributing to the evolution of life on earth including homo sapien brain.[3]

The gravitational and anti-gravitational waves or thought fields are structured in the brain by the reticular formation porphyrion network. The anti-gravitational waves can be thought of as the collective unconscious. The gravitational waves can thus function as a thought field or sub-quantal field on which the particles like neutrons, electrons, bosons, quarks, fermions can pop in and out from waves to particles. The thought field of gravity functions as the universal observer and brings the particulate world of matter into existence. Gravitational waves can form pressure waves which can create gravitational sounds. These thought sounds can undergo soni-luminescence creating photons and electromagnetic radiation the basis of the world of matter. Thus the thought field of gravity and the matter is unified. Thought conscious and unconscious underlies the world of matter.[9]

The porphyrions or supramolecular porphyrin arrays can exist as a wave quantal computer in the gravitational field with the graviton acting as logic gate and as the ubiquitous observer. The porphyrin arrays as wave forms exist as quantal superpositions and the graviton chooses one of the superpositions to macroscopic existence. The porphyrin supramolecular organism arises from the sea of gravitational waves which acts as the conscious mind and the graviton acting as the conscious observer.

The global warming results in channelling of metabolism to porphyrin synthesis by induction of HO1 activity. The human body gets converted into a colony of porphyrions which have a wave particle existence. The human body in its porphyrions incarnation especially in its wave form can disappear from

existence. The human populations by this mechanism can get converted into a civilisation in the quantal world and live in multiple parallel universes for eternity. The quantal wave form of porphyrions by the mechanism of observation by gravitons of the conscious gravitational fields can come into macroscopic existence. The porphyrins can form a template on which isoprenoid organism, RNA viroids, DNA viroids and prions can form. They can self organise to form nanoarchaea and later eukaryotes, prokaryotes, multicellular organisms leading upto primates and humans. This forms the basis of the origin of endosymbiotic actinide dependent cholesterol catabolizing archaea in humans. The human civilisation can arise from the nothingness of the quantal foam of gravitational waves mediating consciousness and disappear into nothingness.

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5

Quantal Civilisation - The Human Brain and Evolution, Extinction and Reproduction of Universe - The Universe as a Creation of the Mind

Introduction

The porphyrins are tetrapyrolle rings which self organize and can self replicate. The porphyrin arrays which can function as a supramolecular organism the self replicatory features. Porphyrin arrays can form templates on which other porphyrin arrays can form. Such self replicatory supramolecular porphyrin arrays can be called as porphyrions. The stress of global warming converts the body into a porphyrion colony or network. The porphyrins have got macroscopic wave particle existence. The porphyrins have also magnetic properties because of the iron centre. The porphyrin arrays can exist as quantal wave arrays as part of quantal form functioning as quantal computers capable of information storage and self replication. This could be a form of quantal life. The human consciousness depends upon three factors: perceptual synchronization, focused attention and working memory. Gravitational waves could form the basis of consciousness. Similarly, the human unconscious could be structured by anti-gravity. The porphyrions play a role in consciousness and in the creation of the universe.

The global warming results in channelling of metabolism to porphyrin synthesis by induction of HO1 activity. The human body gets converted into a colony of porphyrions which have a wave particle existence. The human body in its porphyrions incarnation especially in its wave form can disappear from existence. The human populations by this mechanism can get converted into a civilisation in the quantal world and live in multiple parallel universes for eternity. The quantal wave form of porphyrions by the mechanism of observation by gravitons of the conscious gravitational fields can come into macroscopic existence. The porphyrins can form a template on which isoprenoid organism, RNA viroids, DNA viroids and prions can form. They can self organise to form nanoarchaea and later eukaryotes, prokaryotes,

multicellular organisms leading upto primates and humans. This forms the basis of the origin of endosymbiotic actinide dependent cholesterol catabolizing archaea in humans. The human civilisation can arise from the nothingness of the quantal foam of gravitational waves mediating consciousness and disappear into nothingness.

The interstellar space is filled with star dust which is postulated to be of biological origin. Fred Hoyle in his hypothesis of the life cloud has put forward an extra terrestrial origin for life on earth. The existence of an extra terrestrial force controlling the genesis and evolution of life on earth has been put forward by many authors. The biocosm theory postulates that the conditions in the universe have been so adjusted to make it possible for life to exist on earth and the universe. This leads to the postulate that the universe exists and reproduces because of life which acts as a quantal observer. This paper deals with the role of extremophilic archaea and RNA viroids extruded from the archaeal cells as primitive anthropomorphic observers making it possible for the universe to exists and evolve. The human race is divided into two species homo sapiens and homo neanderthalis. The homo neanderthalis interbred with homo sapiens to produce a hybrid species. Therefore there are species with more of neanderthalic origin and homo sapien species in earth. The previous studies have demonstrated matrilineal societies with more of neanderthalic origin in contrast to patrilineal societies. The origin of neanderthalic societies and homo sapien communities was ascribed to symbiosis. The Neanderthal species has more of extremophilic archaeal symbiosis occurring in the extremes of climate like the ice age and global warming. The homo sapien species has more of intragenomic RNA viroid/retroviral symbiosis which contribute to the dynamicity of the homo sapien genome. The Neanderthal species were retroviral resistant. The origin of the archaea and the RNA viroids are possibly from the interstellar space as archaeal clouds and RNA viroidal quantal

computing clouds which function as extra terrestrial intelligence. The RNA viroids are extruded by archaeal cells. They would have reached the earth via meteoroidal impacts and seeded life on earth. The archaeal colonies would have organized into the homo neanderthalic species in Eurasia and RNA viroidal colonies would have led to the evolution of homo sapien species in Africa.[1-16] The paper deals with this hypothesis.

Materials and Methods/ Results

The blood samples were drawn from the homo neanderthalic matrilineal species and the homo sapien species. The estimations done in the blood samples collected include cytochrome F420 activity. The generation of RNA viroids in the plasma was studied. The results showed that the matrilineal species of neanderthalic origin had more of archaeal symbiosis while the homo sapien species had more of RNA viroidal symbiosis.

Table 1. *Cytochrome F420 activity.*

		Sudra	Non-sudra	F value	P value
CYT F420 % (Increase with Cerium)	Mean	23.46	4.48	306.749	< 0.001
	±SD	1.87	0.15		
RNA % change (Increase with Rutile)	Mean	4.37	23.59	427.828	< 0.001
	±SD	0.13	1.83		
RNA % change (Decrease with Doxy)	Mean	18.38	65.69	654.453	< 0.001
	±SD	0.48	3.94		

Discussion

The quantal wave form or the Higgs field gives mass and energy to the particles like protons, neutrons and electrons when it interacts with it. The quantal wave forms can generate porphyrins. Porphyrins can have a

macromolecular and wave existence which is interconvertible. The porphyrin arrays can self organize and self reproduce. The macromolecular porphyrin arrays would have functioned as intelligent organisms in the interstellar space. The iron porphyrins can undergo photooxidation and generate a magnetic field. The photonic interaction with the magnetic porphyrins can generate black holes which can collapse to a point before singular density. At this point of time it can undergo rebounce producing new universes. The porphyrin organism with its quantal computing function served as the initial anthropomorphic observer or the lotus of Brahma. The porphyrins would have formed a template for RNA viroids and prions to form. This would have generated primitive archaeal forms. The primitive archaeal cell can extrude RNA viroids generating RNA viroidal clouds. The intergalactic magnetic field generated by the archaea and magnetic porphyrin organism would have contributed to the evolution of star systems and galaxies. The archaeal clouds and RNA viroidal clouds would have served as interstellar intelligence guiding the formation of star systems and galaxies and also functioning as anthropomorphic observers. The meteoritic impacts would have transferred the archaeal and RNA viroidal colonies to earth. They would have self organized into plant and animal species as well as homo sapien and homo neanderthalic species. The homo neanderthalic species are archaeal dominant. The homo sapien species are RNA viroidal dominant.[1-16]

The big bang cosmology postulates the evolution of the universe from the Higgs field. Higgs field is made up of Higgs Boson and top quarks. Higgs Boson can exists in two states. The stable state which is of high energy, low density compatible with the present existence of universe and the unstable state which is of low energy and high density. The universe is presently in the edge of the stable state. The low energy high density state is unstable and can cause catastrophic vacuum expansion leading to the end of the universe. The Frohlich model of quantal brain function postulates the existence of Bose-Einstein

condensates in the brain at normal temperature. There are dipolar magnetite and porphyrin molecules in the brain which in the context of membrane sodium potassium ATPase inhibition can lead onto a pumped phonon system producing Bose-Einstein condensate and bosons in the brain. This boson can become unstable leading onto catastrophic vacuum collapse and the possible extinction of the universe. The Frohlich model of Bose-Einstein condensate formed of magnetic dipolar porphyrins and archaeal magnetite in cellular lipid emulsions can interact with photons generating black holes. This black hole can collapse to singularity. But the collapse happens only upto a particular point following which the density or singularity undergoes a rebounce producing a new universe with a new set of universal constants. Thus the quantal model of brain function can lead onto the destruction and reproduction of universes. The brain can be considered to be a multicellular quantal computing archaeal network in the case of homo neanderthalis. The synaptic networks of the brain parallel the galactic networks of the universe. The brain functions as the universal quantal computer and anthropomorphic observer creating and destroying as well as reproducing universes. This occurs to a lesser extent in the homo sapien brain.[1-16]

The homo neanderthalis species would tally with the biblical fallen angels and the homo sapien species representing the God angel. They are basically visitations of extra terrestrial intelligence as archaeal and RNA viroidal colonies. The homo neanderthalis is an evolved archaeal colony network. The archaea extrudes RNA viroids. The homo sapien species is RNA viroidal dominant with RNA viroids integrated into the genomic DNA. The organization of race and caste system in India points to such an origin. The homo neanderthalic species had an initial habitation in the Indian ocean continent which had a catastrophic extinction by archaeal expansion in the ocean crust which generated dangerous tsunamis during ice age. The Neanderthals migrated to the Eurasian landmass creating the civilization of Harappa, Sumeria and Egypt. They are the asuras of Rig veda. The

homo neanderthalic species are fair, matrilineal, asexual, spiritual, altruistic and community organised. These civilizations were basically matrilineal and creative. They were paganistic, secular and atheistic. They were environmentally conscious living in quantal interaction with the world around creating a feeling of environmental spiritual consciousness. The society formed on this basis functioned as an organic whole in quantal interaction with one another. It was equal, just and functioned as primitive form of socialistic society. The homo neanderthalis species was essentially asexual with the gender equality and matrilinearity. The archaeal overgrowth consequent to global warming can lead to eventual neanderthalisation of the human species and brain. The brain neuronal cortex shrinks due to quantal perception of electromagnetic fields which pollute the globalized warm world. There is also consequent cerebellar hypertrophy. Cerebellar hypertrophy can lead onto schizophrenia and autistic modes of behaviour. Cerebellar hypertrophy can lead to cerebellar dysfunction and motor ataxia. The motor ataxia and the clumsiness of movement and speech would have lead to the evolution of abstract painting, dance, music, symbolic speech and eventually speech in the Neanderthals. The neanderthalisation of the human brain consequent to global warming leads to evolution of rock music, dance and modern forms of abstract painting. The Neanderthal brain owing to magnetite mediated increased quantal perception are more spiritual. The Neanderthal community owing to quantal perception functions as one single whole leading to altruism, spirituality, socialism, gender equality and ecospirituality. This represents the civilisational mode of the eastern world. The societies emerged from the possible Lemurian landmass. As they evolved out of extra terrestrial archaeal colonies and intelligence their level of development and intelligence was high. They possessed the original language and the concept of a human Godhead was developed first in their civilization. The Rig veda is the oldest spiritual book of humankind. Most of the Gods described in Rig veda were of asuric origin even

Varuna, the principal God. The major philosophical entities of Buddhism and Jainism which are basically atheistic religions preaching social equality, oneness and justice were evolved by the asuras. The homo sapiens evolved in Africa and migrated to the Eurasian landmass. They had basically an RNA viroidal symbiosis in the brain which gave rise to a practical less creative brain. The homo sapien species are patrilineal, commonsensical and individualistic. The homo sapien community forms the devas of the vedic literature and the Rig veda describes clashes and wars between the asuric inhabitants of Harappa and the invading devas. They over ran the neanderthalic civilizations and created a racial society with the homo sapiens as the ruling class and the Neanderthals as the under caste of sudras. The sudras formed the discriminated underbelly of the civilization. The literature, language and holy books of the asuras were taken over by the uncivilized homo sapienic devas who made it into their own. The future generations of sudras were prevented from learning their language and worshiping their Gods which were taken over by the homo sapienic devas. The homo sapienic devas were theistic, individualistic, unaltruistic and had no communal or societal consciousness. This signifies the civilisational mode of the western world. The archaeal growth in homo sapiens is less. This leads onto less of magnetite mediated quantal perception and universal oneness. This contributes to the individuality, selfishness, unaltruistic behaviour, unbridled capitalism and the patriarchal gender unequal society of the homo sapien world.[1-16]

The homo neanderthalic society owing to increased quantal perception is spiritual and feels the oneness of the world and the godliness of individual human beings. This leads onto the philosophy of Buddhism with its sense of atheism and human values. Buddhism and Jainism as well as the Mauryan empire represents victory for the asuric Neanderthals or the sudras. The Buddhist and Hindu society of neanderthalic world considered good and evil as part of the same quantal world representing the universal soul. The godhead and

the fallen angel belong to the same quantal world of the universal soul. The concept of right and wrong are not absolute contraindications but part of the same quantal world. The quantal perception produces information storage after mortality and the idea of reincarnation. The increased world of quantal perception mediated oneness and the cholesterol catabolizing archaeal overgrowth leading to sex hormone deficiency produces the gender equal asexual world. Sexuality is not considered as something apart from religion as evidenced by the tantric schools of Hinduism and Buddhism. It was considered as a form of experiencing oneness as indicated by ideas such as Kundalini. The increased quantal perception leads to a feeling of oneness which produces universal unity. There is no war but universal peace. Eastern societies like China and India are basically quantal docile societies with war being uncommon. The major wars in Hindu history like the Mahabharata and Ramayana war were those between the colonizing homo sapien devas and the native peaceful Neanderthals. The Pandava army were the homo sapien devas and the Kaurava army the neanderthalic natives. The God Rama was the head of homo sapien devas and the Ravana the leader of the native Neanderthals. The devas were the head of the colonizing homo sapiens from Europe. They could win the Mahabharata and Ramayana wars and the sudric neanderthalic native population was rendered to slavery for generation to come. The independence struggle and Gandhi's attitude to the lower caste and harijans were a part of the same phenomena. The homo sapien world on the other hand due to reduced quantal perception was individualistic. Good and evil were absolutely different as the God and the fallen angel. There was no belief in reincarnation and sexuality was considered as taboo. The homo sapien society owing to its reduced quantal perception and individualistic nature discovered wars and slavery. Wars are essentially a feature of semitic societies and religion. The homo sapien devas are capitalistic and rightist in their attitude to society while

the homo neanderthalis is communistic and socialistic. The war between capitalism and socialism is representative of that between Neanderthals and homo sapiens. The phenomena of global warming, archaeal overgrowth and neanderthalisation of homo sapiens will lead to a more peaceful, globalized, spiritual, gender equal and altruistic society. But the Neanderthal domination resulting from global warming can lead to the society's own demise.[1-16]

The phenomena of climate change and global warming leads onto archaeal multiplication and neanderthalisation of the human race. Archaeal growth occurs in extremes of climate - the ice age and in times of global warming. This results in a return to asuric culture and civilization with its spiritual, environmentally conscious, socialistic, asexual and group identity. The modern world is represented by the Kali yuga where the sudras or the Neanderthals return to a position of power and global significance. This represents the rise of the asuric neanderthalic sudric slaves. This is represented by the rise of neanderthalic eastern societies of China and India as well as the decline of the homo sapien West and Africa. The neanderthalisation of homo sapiens due to archaeal growth can lead to human disease and eventual extinction. The archaea catabolizes cholesterol to generate digoxin. Digoxin functions as the neanderthalic hormone. Digoxin produces membrane sodium potassium ATPase inhibition and increased intracellular calcium and reduced magnesium. Magnesium deficiency leads to mitochondrial dysfunction, vasospasm, dyslipidemia and metabolic syndrome x. The increase in intracellular calcium leads to oncogene activation and malignancies. The increase in intracellular calcium can activate NFKB leading to immune activation and autoimmune disease. The increased intracellular calcium can activate the caspase cascade leading onto cell death and degenerations. The increase in intracellular calcium can increase synaptic release of monoamine neurotransmitters producing schizophrenia and autism. The increase in archaeal growth can produce the Warburg phenotype with increased glycolysis and

mitochondrial dysfunction. The increased glycolysis can activate the lymphocyte producing autoimmune disease as lymphocytes are dependent on glycolysis for energy needs. The cancer cells also depend on glycolysis for energy needs. The Warburg phenotype can lead onto increase in malignancies. The Warburg phenotype and increased glycolysis can lead to poly ribosylated glyceraldehyde 3 phosphate dehydrogenase mediated cell death and degeneration. The Warburg phenotype can lead to magnesium deficiency related insulin resistance and mitochondrial dysfunction leading to schizophrenia. Thus archaeal mediated hyperdigoxinemia and Warburg phenotype can lead to civilisational diseases in the Neanderthal phenotype leading onto its extinction. The archaeal overgrowth in the ocean crust owing to global warming can lead to release of large amounts of methane producing oceanic earthquakes, tsunamis and destruction and splitting up of continents. This leads onto the catastrophic end of the world. As also the archaeal porphyrin and magnetite mediated Frohlich model of Bose-Einstein condensates in the brain generated bosons can undergo catastrophic vacuum decay leading to universal extinction. The magnetic dipolar porphyrins and magnetite in the lipid emulsion of brain cells can be photonically excited generating black holes. These black holes don't reach absolute singularity, but near that point can undergo a phenomenon called rebounce reproducing the universe. Thus the neanderthalisation of human brain and generation of Bose-Einstein condensate of the Frohlich model can lead to extinction and reproduction of the universe.[1-16]

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6

Quantal Civilisation - Gravitational Waves, the Universe and Structure of the Human Mind - Evidence from Studies on Coma, Schizophrenia and Autism

Introduction

The porphyrins are tetrapyrolle rings which self organize and can self replicate. The porphyrin arrays which can function as a supramolecular organism the self replicatory features. Porphyrin arrays can form templates on which other porphyrin arrays can form. Such self replicatory supramolecular porphyrin arrays can be called as porphyrions. The stress of global warming converts the body into a porphyrion colony or network. The porphyrins have got macroscopic wave particle existence. The porphyrins have also magnetic properties because of the iron centre. The porphyrin arrays can exist as quantal wave arrays as part of quantal form functioning as quantal computers capable of information storage and self replication. This could be a form of quantal life. The human consciousness depends upon three factors: perceptual synchronization, focused attention and working memory. Gravitational waves could form the basis of consciousness. Similarly, the human unconscious could be structured by antigravity. The porphyrions play a role in consciousness and in the creation of the universe.

The global warming results in channelling of metabolism to porphyrin synthesis by induction of HO1 activity. The human body gets converted into a colony of porphyrions which have a wave particle existence. The human body in its porphyrions incarnation especially in its wave form can disappear from existence. The human populations by this mechanism can get converted into a civilisation in the quantal world and live in multiple parallel universes for eternity. The quantal wave form of porphyrions by the mechanism of observation by gravitons of the conscious gravitational fields can come into macroscopic existence. The porphyrins can form a template on which isoprenoid organism, RNA viroids, DNA viroids and prions can form. They can

self organise to form nanoarchaea and later eukaryotes, prokaryotes, multicellular organisms leading upto primates and humans. This forms the basis of the origin of endosymbiotic actinide dependent cholesterol catabolizing archaea in humans. The human civilisation can arise from the nothingness of the quantal foam of gravitational waves mediating consciousness and disappear into nothingness.

Studies on normal conscious individuals, comatose patients and disorders of consciousness like schizophrenia and autism show changes in cerebrospinal fluid archaeal activity as measured by cytochrome F420 assay. Schizophrenia and autism show increased CSF cytochrome F420 activity, normal conscious patients show normal activity and comatose patients with bihemispheric infarction and secondary brain stem compression due to transtentorial herniation had no activity at all. This indicated actinidic archaeal growth in the central nervous system. Actinidic archaea can modulate conscious perception. Actinidic archaea are extremophiles and can grow in extremes of temperature, space and hypergravity situation.[1-3] This led to the plausibility of gravity sensing brain actinidic archaea mediating consciousness and also consciousness as a feature of gravitational forces. Gravity extends as gravitational waves made up of possible gravitons throughout the universe.[4] Gravitational waves can form pressure waves which can create gravitational sounds. These thought sounds can undergo soni-luminescence creating photons and electromagnetic radiation the basis of the world of matter. Conscious perception involves three factors - perceptual synchronization, focused attention mediated by the reticular thalamic nucleus and the thalamo-cortico-thalamic reticular reverberatory circuit.[5] These structures are modulated by gravity as demonstrated by the classical pyramidal syndrome where the tone is more in the anti-gravity groups of muscles. Gravitational attraction by its nature can modulate perceptual binding and focused attention.[6] Gravitation can also mediate working memory involving a

fraction of a second structured in the reticular - thalamo-cortico-thalamic - reticular reverberatory circuit formation. The reticular formation can be considered as a primitive archaeal colony network of hypergravity sensing archaea of possible exobiologic origin.[7] Gravity can thus function as a thought field permeating the whole universe as gravitational waves made up of possible gravitons which are massless particles travelling at the speed of light. The gravitational waves form the sub-quantal field from which quarks, fermions, bosons, electrons, neutrons, positrons and photons can pop up as particles from their waveforms embedded in the sea of gravitational waves with possible gravitons of the thought field functioning as the ubiquitous observer. Thus the thought field of gravity and the matter is unified. Thought underlies the world of matter.[8]

Studies in our laboratory have demonstrated changes in cerebrospinal fluid cytochrome F420 activity in the cerebrospinal fluid of conscious, comatose patients, schizophrenia and autism. The cerebrospinal fluid was checked for cytochrome F420 activity by spectrophotometry. The activity was increased in schizophrenia and autism, absent in coma and present with low intensity in normal conscious individuals. The activity of cytochrome F420, the methanogenic cytochrome increased with addition of the actinide cerium. This indicated actinide dependent archaeal growth. Actinidic archaea are extremophiles and can grow in extremes of temperature, space and hypergravity situation.[1] Actinides have a role in abiogenesis.[2] This led to the plausibility of hypergravity sensing brain actinidic archaea mediating consciousness and also consciousness as a feature of gravitational forces. This led to the possibility of exobiologic actinidic archaea which are paleospermic in origin contributing to the evolution of life on earth including homo sapien brain.[3]

Materials and Methods

The permission of the ethics committee of the centre and individual consent was obtained for the study. The groups included in the study are normal conscious individuals (undergoing spinal procedures for surgery), persistent vegetative bihemispheric infarction patients and disorders of consciousness like schizophrenia and autism. There were 10 individuals in each group. CSF was used for the study and the experimental protocol was as follows (I) CSF+phosphate buffered saline, (II) same as I+cholesterol substrate, (III) same as II+cerium 0.1 mg/ml, (IV) same as II+ciprofloxacine and doxycycline each in a concentration of 1 mg/ml. Cholesterol substrate was prepared as described by Richmond. Aliquots were withdrawn at zero time immediately after mixing and after incubation at 37℃ for 1 hour. Cytochrome F420 was estimated flourimetrically (excitation wavelength 420 nm and emission wavelength 520 nm).

Results

CSF of normal subjects showed increased levels of the cytochrome F420 after incubation for 1 hour and addition of cholesterol substrate resulted in still further significant increase in these parameters. The CSF of patients of schizophrenia and autism showed similar results but the extent of increase was more when compared to normal conscious individuals. The CSF of normal conscious individuals showed decreased intensity of cytochrome F420 as compared to CSF of schizophrenia and autism patients. The CSF of comatose patients showed no activity at all. The addition of antibiotics to the normal conscious patient CSF caused a decrease in cytochrome F420 activity while addition of cerium increased its activity. The addition of antibiotics to the schizophrenia and autism CSF caused a decrease in cytochrome F420 activity

while the addition of cerium increased its activity but the extent of change was more in patient's sera as compared to normal conscious individuals. The CSF of comatose patients showed no activity of cytochrome F420 at all in the normal state as well as after addition of antibiotics and cerium. The results are expressed as percentage change in the parameters after 1 hour incubation as compared to the values at zero time.

Table 1. *Effect of cerium and antibiotics on cytochrome F420.*

Group	**CYT F420 % (Increase with Cerium)**		**CYT F420 % (Decrease with Doxy+Cipro)**	
	Mean	**±SD**	**Mean**	**±SD**
Normal	4.48	0.15	18.24	0.66
Comatose	Zero activity		Zero activity	
Schizophrenia	23.24	2.01	58.72	7.08
Autism	21.68	1.90	57.93	9.64
F value	306.749		130.054	
P value	< 0.001		< 0.001	

Discussion

The patients admitted with bilateral middle cerebral artery stem occlusion after recovery from the acute stroke developed double hemiplegia, spasticity and pseudobulbar palsy. They go into the persistent vegetative state with loss of conscious perception. The limbs are kept in a posture of flexed upper limbs and extended lower limbs. The tone is more in the antigravity group of muscles - the flexors of the upper limb and extensors of lower limb. This is classical of spasticity and pyramidal syndrome. Gravity has an effect on muscle tone. The spasticity is produced by involvement of the extrapyramidal tracts, the dorsal reticulospinal and ventral reticulospinal. The reticular formation is an extensive primitive network of the brain in the brainstem projecting to the prefrontal cerebral cortex, cerebellum and the spinal cord. It forms long loop formations

extending from the caudal to the cephalic part of the central nervous system. The inhibition of the dorsal reticulospinal tract in pyramidal lesions results in hypertonia and hyperreflexia and inhibition of the ventral reticulospinal tract produces the Babinski sign. The cerebellum is concerned with motor programming and memory and robotic acts which do not reach conscious function. The cerebellum is concerned with cognition. The cerebellum plays a role in unconscious motor acts, extrasensory perception and quantal perception. The prefrontal cortex is concerned with executive memory, logic, reasoning and judgment. Thus the reticular formation forms the bridge between the conscious and unconscious parts of the brain. Reticular formation is a primitive neural network. The dentrites and axons forming the bridges of the neural network can be compared to a bacterial flagella based on the symbiotic theory of Margulis on cell evolution.[7] Margulis postulated that bacteria like spirochetes contributes to the cytoskeleton and axodendritic tree of the brain. Studies from this laboratory have demonstrated archaeal cytochrome F420 activity in the cerebrospinal fluid and blood. The brain reticular formation can be compared to a primitive archaeal bacterial colony network inhabiting the CNS from one end to other. The archaea being extremophiles would have evolved in the outer space in hypergravity situations and reached the earth by meteoric impacts producing the seeding of life on earth. The reticular formation and its connections form the basis of gravitational action in the brain.

Bacteria can grow in hypergravity as in the case of extremophilic archaea.[2, 3] Gravity may thus involved in bacterial panspermia and exobiology with actinidic archaea as the prime example.[3] Studies on effects of low gravity in space show drastic effects in human brain. Nerve cells need gravity to grow and function properly. The lack of gravity affects neuronal migration and produces microcephaly. The dendritic tree in the absence of gravity looks like as if it has been stripped off all branches. Gravity structures the brain. Gravity can

modulate the pyramidal and extrapyramidal syndrome. Rigidity is more in the muscles acting on gravity. Gravity can modulate cerebellar hypotonia. Gravity can also affect conscious perception. The syndrome of G-LOC is described in fighter pilots exposed to high gravity field chambers. They have features of near-death experience with godly visions, meeting dead relatives, seeing hallucinatory lights and tunneling effect. Cortical and cerebellar lesions produce different clinical signs. Cortical lesions lead to spasticity and anti-gravity effects. Cerebral cortex is the basis of conscious perception. When the cerebral cortex is damaged anti-gravity effects take over. An anti-gravity force opposed to gravity in the universe has been described. Cerebellar lesions lead onto hypotonia, ataxia and a levitationary effect which can be considered as antigravity. Gravity structures the brain and can be considered to be a thought field which forms the basis of consciousness and creation of matter. Gravitational waves unite mind and matter and form the substratum of it.

Consciousness depends on three parameters - working memory, perceptual synchronization and focused attention.[5] This theory was put forward by Crick who localised consciousness into the reticular - thalamo-cortico-thalamic - reticular pathway. Gravity would form the basis of consciousness. Perceptual synchronization and focused attention would depend upon gravitational attraction which are ideal forces to create these two phenomena. This also would create a form of working memory in the flow of nerve impulses in the reticular - thalamo-cortico-thalamic - reticular reverberatory circuit. The brain functions as a quantum computer and we sense the multitudinal quantal possibilities in the world. The dipolar archaeal magnetite in the setting of endogenous digoxin induced membrane sodium potassium ATPase inhibition can create a pumped phonon system mediating quantal perception. When one of the possibilities reaches one graviton criteria it reaches conscious perception. Gravity thus can be considered as a thought field or consciousness field

permeating throughout the whole universe. Gravitational waves can form pressure waves which can create gravitational sounds. These thought sounds can undergo soni-luminescence creating photons and electromagnetic radiation the basis of the world of matter. Soni-luminescence can create matter out of gravitational sounds. Thus the thought field can create the matter. Mind and matter can be unified.

Gravity is a vector force that has magnitude and direction at each point of space. Gravity loading is directed towards the centre of the earth. The theory of gravity says that every object in the universe attracts every other object with a force proportional to its mass. Gravitational force exists throughout the universe and is formed of gravitational waves. The gravitational waves are made up of possible particles called gravitons and travels with the speed of light. Gravity plays an important role in the creation of the universe as described by Stephen Hawking.[4] Hawking postulated that if the total energy of the universe must always remain zero and it costs energy to create a body the whole universe cannot be created out of nothing. That is why there should be a law like gravity. Because gravity is attractive gravitational energy is negative. One has to do work to separate gravitationally bound systems like earth and moon. This negative energy can balance the positivity energy needed to create matter. On the scale of the entire universe the positive energy of matter can be balanced by negative gravitational energy and so there is no restriction on the creation of the whole universe. Gravity is described by Hawking as a curvature in space-time. Le Sage in his theory of gravity describes it as gravitational waves formed of ultima mundae corpuscles which impinge on matter and penetrate it.[6] Matter shields each other against gravity producing an attraction force. Gravitational waves and particles penetrate all matter and interact with the sub-atomic particles. Quantum gravitational waves is possibly the sub-quantal potential of Bohm from which all the particles like electron, neutrons, positrons come out

and go as pertuberations. The mass of a particle depends upon its interaction with the Higgs field and exchange of Bosons with it. Gravitons are a form of Bosons with reverse spin. They can be considered as extending throughout the universe and are mass less. Gravity and light travel with the same speed as thought. Gravity can form the basis of human thought. Human thought fields according to Bohm underlies the sub-quantal potential from which all particles emanate.[8]

The gravitational waves or thought fields are structured in the brain by the reticular formation actinidic archaeal network. The gravitational waves can thus function as a thought field or sub-quantal field on which the particles like neutrons, electrons, bosons, quarks, fermions can pop in and out from waves to particles. The thought field of gravity functions as the universal observer and brings the particulate world of matter into existence. Gravitational waves can form pressure waves which can create gravitational sounds. These thought sounds can undergo soni-luminescence creating photons and electromagnetic radiation the basis of the world of matter. Thus the thought field of gravity and the matter is unified. Thought underlies the world of matter.[8]

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7

Quantal Civilisation - Anti-gravitational Waves, the Universe and Structure of the Human Unconscious Mind - Evidence from Studies on Schizophrenia and Autism

Introduction

The porphyrins are tetrapyrolle rings which self organize and can self replicate. The porphyrin arrays which can function as a supramolecular organism the self replicatory features. Porphyrin arrays can form templates on which other porphyrin arrays can form. Such self replicatory supramolecular porphyrin arrays can be called as porphyrions. The stress of global warming converts the body into a porphyrion colony or network. The porphyrins have got macroscopic wave particle existence. The porphyrins have also magnetic properties because of the iron centre. The porphyrin arrays can exist as quantal wave arrays as part of quantal form functioning as quantal computers capable of information storage and self replication. This could be a form of quantal life. The human consciousness depends upon three factors: perceptual synchronization, focused attention and working memory. Gravitational waves could form the basis of consciousness. Similarly, the human unconscious could be structured by anti-gravity. The porphyrions play a role in consciousness and in the creation of the universe.

The global warming results in channelling of metabolism to porphyrin synthesis by induction of HO1 activity. The human body gets converted into a colony of porphyrions which have a wave particle existence. The human body in its porphyrions incarnation especially in its wave form can disappear from existence. The human populations by this mechanism can get converted into a civilisation in the quantal world and live in multiple parallel universes for eternity. The quantal wave form of porphyrions by the mechanism of observation by gravitons of the conscious gravitational fields can come into macroscopic existence. The porphyrins can form a template on which isoprenoid organism, RNA viroids, DNA viroids and prions can form. They can self organise to form nanoarchaea and later eukaryotes, prokaryotes,

multicellular organisms leading upto primates and humans. This forms the basis of the origin of endosymbiotic actinide dependent cholesterol catabolizing archaea in humans. The human civilisation can arise from the nothingness of the quantal foam of gravitational waves mediating consciousness and disappear into nothingness.

The cerebellum is the site of the unconscious brain. Cerebellum is concerned with automatic acts. Robotic behavior as seen in autism is localized to cerebellum. The cerebellum is concerned with extrasensory perception, magical acts, poltergeist phenomena and spiritual acts. The cerebellum can be described as the part of the collective unconscious. Cerebellar lesions also manifest with motor phenomenon. Lesions of the cerebellum manifest with axial and appendicular ataxia. This gives a sense of antigravity feeling. Cerebellum is concerned with the tone of the antigravity muscles. The antigravity fields and waves are sensed by the cerebellum. Cerebellar lesions manifest with cognitive dysfunction described as the cerebellar cognitive affective disorder. Cerebellar dysfunction is described in autism and schizophrenia. Studies on normal conscious individuals and disorders of consciousness like schizophrenia and autism show changes in cerebrospinal fluid archaeal activity as measured by cytochrome F420 assay. Schizophrenia and autism show increased CSF cytochrome F420 activity and normal conscious patients show normal activity. This indicated actinidic archaeal growth in the central nervous system. Actinidic archaea can modulate conscious perception. Actinidic archaea are extremophiles and can grow in extremes of temperature, space and antigravity situation.[1-3] This led to the plausibility of antigravity wave sensing brain actinidic archaea mediating the functions of the unconscious brain.

Materials and Methods

The permission of the ethics committee of the centre and individual consent was obtained for the study. The groups included in the study are normal conscious individuals (undergoing spinal procedures for surgery), persistent vegetative bihemispheric infarction patients and disorders of consciousness like schizophrenia and autism. There were 10 individuals in each group. CSF was used for the study and the experimental protocol was as follows (I) CSF+phosphate buffered saline, (II) same as I+cholesterol substrate, (III) same as II+cerium 0.1 mg/ml, (IV) same as II+ciprofloxacine and doxycycline each in a concentration of 1 mg/ml. Cholesterol substrate was prepared as described by Richmond. Aliquots were withdrawn at zero time immediately after mixing and after incubation at 37℃ for 1 hour. Cytochrome F420 was estimated flourimetrically (excitation wavelength 420 nm and emission wavelength 520 nm).

Results

CSF of normal subjects showed increased levels of the cytochrome F420 after incubation for 1 hour and addition of cholesterol substrate resulted in still further significant increase in these parameters. The CSF of patients of schizophrenia and autism showed similar results but the extent of increase was more when compared to normal conscious individuals. The CSF of normal conscious individuals showed decreased intensity of cytochrome F420 as compared to CSF of schizophrenia and autism patients. The addition of antibiotics to the normal conscious patient CSF caused a decrease in cytochrome F420 activity while addition of cerium increased its activity. The addition of antibiotics to the schizophrenia and autism CSF caused a decrease in cytochrome F420 activity while the addition of cerium increased its activity but

the extent of change was more in patient's sera as compared to normal conscious individuals. The results are expressed as percentage change in the parameters after 1 hour incubation as compared to the values at zero time.

Table 1. *Effect of cerium and antibiotics on cytochrome F420.*

Group	CYT F420 % (Increase with Cerium)		CYT F420 % (Decrease with Doxy+Cipro)	
	Mean	±SD	Mean	±SD
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F value	306.749		130.054	
P value	< 0.001		< 0.001	

Discussion

Dark matter and dark energy is the repulsive antigravity force that permeates the entire universe opposing gravity. It is responsible for the missing mass of the universe and constitutes 70 percent of the mass of the universe. It is responsible for the expansion of the universe. Antigravity exists as possible antigravity waves. This forms part of quantum vacuum were matter and anti-matter particles and gravity and antigravity particles meet and annihilate each other. This gives rise to the phenomenon of zero point energy or vacuum energy which drives the creation of the universe.

Just as gravity forms the conscious mind antigravity forms the unconscious mind pervading the universe as a whole. All forms of the universe are sustained by dark energy which can be called as prana, chi and ki. The dark energy permeates both animate and inanimate objects. When the dark energy recedes from an organ it loses its function. The dark energy is the cause of the function of the body and mind. At death the dark energy leaves the body and mixes with

that of the universe. Our growth as a human body is against gravity and is an antigravity phenomenon. Levitation is also an antigravity phenomenon. The antigravity or dark energy or dark matter exists as antigravity waves. This forms the unconscious mind.

The cerebellum is concerned with motor programming and memory and robotic acts which do not reach conscious function. The cerebellum is concerned with cognition. The cerebellum plays a role in unconscious motor acts, extrasensory perception and quantal perception. The prefrontal cortex is concerned with executive memory, logic, reasoning and judgment. Thus the reticular formation forms the bridge between the conscious and unconscious parts of the brain. Reticular formation is a primitive neural network. The dentrites and axons forming the bridges of the neural network can be compared to a bacterial flagella based on the symbiotic theory of Margulis on cell evolution.[7] Margulis postulated that bacteria like spirochetes contributes to the cytoskeleton and axodendritic tree of the brain. Studies from this laboratory have demonstrated archaeal cytochrome F420 activity in the cerebrospinal fluid and blood. The brain reticular formation can be compared to a primitive archaeal bacterial colony network inhabiting the CNS from one end to other. The archaea being extremophiles would have evolved in the outer space in hypergravity situations and reached the earth by meteoric impacts producing the seeding of life on earth. The reticular formation and its connections form the basis of gravitational action in the brain.

Bacteria can grow in hypergravity and antigravity as in the case of extremophilic archaea.[2, 3] Gravity may thus involved in bacterial panspermia and exobiology with actinidic archaea as the prime example.[3] Studies on effects of low gravity in space show drastic effects in human brain. Nerve cells need gravity to grow and function properly. The lack of gravity affects neuronal

migration and produces microcephaly. The dendritic tree in the absence of gravity looks like as if it has been stripped off all branches. Gravity structures the brain. Gravity can modulate the pyramidal and extrapyramidal syndrome. Rigidity is more in the muscles acting on gravity. Gravity can modulate cerebellar hypotonia. Gravity can also affect conscious perception. The syndrome of G-LOC is described in fighter pilots exposed to high gravity field chambers. They have features of near-death experience with godly visions, meeting dead relatives, seeing hallucinatory lights and tunneling effect.

Cortical and cerebellar lesions produce different clinical signs. Cortical lesions lead to spasticity and antigravity effects. Cerebral cortex is the basis of conscious perception. When the cerebral cortex is damaged antigravity effects take over. An antigravity force opposed to gravity in the universe has been described. Cerebellar lesions lead onto hypotonia, ataxia and a levitationary effect which can be considered as antigravity. Gravity structures the brain and can be considered to be a thought field which forms the basis of consciousness and creation of matter. Gravitational waves unite mind and matter and form the substratum of it. Gravity and light travel with the same speed as thought. Gravity can form the basis of human thought. Human thought fields according to Bohm underlies the sub-quantal potential from which all particles emanate.[8] Thought fields include gravitational waves which form consciousness and anti-gravitational waves which forms the unconscious brain.

The unconscious mind is localized in the cerebellum and brain stem. The cerebellum has got a cognitive function and disorders of cerebellum presents as cerebellar cognitive affective disorder. The cerebellar motor disorder presents as ataxia and has got an antigravity component. The cerebellum modulates the tone of the antigravity muscles. The cerebellum is responsible for learned motor programmes, robotic acts, magical acts, hypnotism, the paranormal,

extrasensory perception and is involved in autism and schizophrenia. The cerebellum is the site for antigravity or dark energy localization in the brain. It is the site of the unconscious mind or the collective unconscious. This is in comparison to the cerebral cortex which is the site of conscious perception and localization of gravitational forces. Anatomical, physiological and functional neuroimaging studies suggest that the cerebellum participates in the organization of higher order function. Behavioural changes were present in patients with lesions involving the posterior lobe of the cerebellum and the vermis. These changes were characterized by impairment in executive functions, working memory, spatial cognition, affective behaviour and language deficits. This is called the cerebellar cognitive affective disorders and is characterized by changes in the function of the unconscious brain.[8]

Actinidic archaea are extremophiles and can grow in extremes of temperature, space and hypergravity and antigravity situation.[1] Actinides have a role in abiogenesis.[2] This led to the plausibility of antigravity and hypergravity sensing brain actinidic archaea mediating consciousness and the unconscious brain. The actinidic archaea in the cerebellum can sense dark energy and dark matter just as it perceives gravity. This led to the possibility of exobiologic actinidic archaea which are paleospermic in origin contributing to the evolution of life on earth including homo sapien brain.[3]

The gravitational and anti-gravitational waves or thought fields are structured in the brain by the reticular formation actinidic archaeal network. The anti-gravitational waves can be thought of as the collective unconscious. The gravitational waves can thus function as a thought field or sub-quantal field on which the particles like neutrons, electrons, bosons, quarks, fermions can pop in and out from waves to particles. The thought field of gravity functions as the universal observer and brings the particulate world of matter into existence. Gravitational

waves can form pressure waves which can create gravitational sounds. These thought sounds can undergo soni-luminescence creating photons and electromagnetic radiation the basis of the world of matter. Thus the thought field of gravity and the matter is unified. Thought conscious and unconscious underlies the world of matter.[9]

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8

Archaeal Modulated Mirror Quantal Perceptive Neurons Mediate Consciousness and Functions as Quantal Observer

Introduction

The human endosymbiotic actinidic archaea catabolizes cholesterol and uses it for its energy metabolism. The ring oxidation of cholesterol generates pyruvate which enters the GABA shunt pathway resulting in the formation of succinyl CoA and glycine used for porphyrin synthesis. The side chain oxidation of cholesterol results in steroid synthesis and the generation of the steroidal glycoside digoxin which serves as an endogenous regulator of the sodium potassium pump inhibiting it. The archaea are magnetotactic and contain the dipolar porphyrins and magnetite. Digoxin by inhibiting the sodium potassium ATPase generates a pumped phonon system involving dipolar porphyrins and magnetite. This generates a Frohlich model of Bose-Einstein condensate at normal temperature resulting in quantal perception. The quantal perception can result in perceiving low level of EMF from the environment. This can generate conscious perception. The generation of porphyrins and digoxin in actinidic archaeal neurons was tested in disorders of consciousness schizophrenia and autism.[1-17]

Materials and Methods

Freshly diagnosed schizophrenia and autism based on DSM IV criteria were chosen for the study. Serum cytochrome 450, digoxin synthesis and porphyrin synthesis were studied. There were 10 patients in each group and each patient had an age and sex matched healthy control selected randomly from the general population. The blood samples were drawn in the fasting state before treatment was initiated. Plasma from fasting heparinised blood was used and the experimental protocol was as follows (I) Plasma+phosphate buffered saline,

(II) same as I+cholesterol substrate, (III) same as II+cerium 0.1 mg/ml, (IV) same as II+ciprofloxacine and doxycycline each in a concentration of 1 mg/ml. Cholesterol substrate was prepared as described by Richmond. Aliquots were withdrawn at zero time immediately after mixing and after incubation at 37℃ for 1 hour. The following estimations were carried out: - Cytochrome F420, digoxin and ALA. Cytochrome F420 was estimated flourimetrically (excitation wavelength 420 nm and emission wavelength 520 nm).

Results

Plasma of control subjects showed increased levels of the above mentioned parameters with after incubation for 1 hour and addition of cholesterol substrate resulted in still further significant increase in these parameters. The plasma of patients showed similar results but the extent of increase was more. The addition of antibiotics to the control plasma caused a decrease in all the parameters while addition of cerium increased their levels. The addition of antibiotics to the patient's plasma caused a decrease in all the parameters while addition of cerium increased their levels but the extent of change was more in patient's sera as compared to controls. The results are expressed in tables 1-3 as percentage change in the parameters after 1 hour incubation as compared to the values at zero time.

Table 1. *Effect of cerium and antibiotics on cytochrome F420.*

Group	CYT F420 % (Increase with Cerium)		CYT F420 % (Decrease with Doxy+Cipro)	
	Mean	**±SD**	**Mean**	**±SD**
Normal	4.48	0.15	18.24	0.66
Schizo	23.24	2.01	58.72	7.08
Autism	21.68	1.90	57.93	9.64
F value	306.749		130.054	
P value	< 0.001		< 0.001	

Table 2. *Effect of cerium and antibiotics on digoxin.*

Group	Digoxin (ng/ml) (Increase with Cerium)		Digoxin (ng/ml) (Decrease with Doxy+Cipro)	
	Mean	**±SD**	**Mean**	**±SD**
Normal	0.11	0.00	0.054	0.003
Schizo	0.55	0.06	0.219	0.043
Autism	0.53	0.08	0.205	0.041
F value	135.116		71.706	
P value	< 0.001		< 0.001	

Table 3. *Effect of cerium and antibiotics on delta amino levulinic acid.*

Group	ALA % (Increase with Cerium)		ALA % (Decrease with Doxy+Cipro)	
	Mean	**±SD**	**Mean**	**±SD**
Normal	4.40	0.10	18.48	0.39
Schizo	22.52	1.90	66.39	4.20
Autism	23.20	1.57	66.65	4.26
F value	372.716		556.411	
P value	< 0.001		< 0.001	

Discussion

The study shows that the human endosymbiotic actinidic archaea catabolizes cholesterol and uses it for its energy metabolism. The ring oxidation of

cholesterol generates pyruvate which enters the GABA shunt pathway resulting in the formation of succinyl CoA and glycine used for porphyrin synthesis. The side chain oxidation of cholesterol results in steroid synthesis and the generation of the steroidal glycoside digoxin which serves as an endogenous regulator of the sodium potassium pump inhibiting it. The archaea are magnetotactic and contain the dipolar porphyrins and magnetite. Digoxin by inhibiting the sodium potassium ATPase generates a pumped phonon system involving dipolar porphyrins and magnetite. This generates a Frohlich model of Bose-Einstein condensate at normal temperature resulting in quantal perception. The quantal perception can result in perceiving low level of EMF from the environment. This can generate conscious perception. The generation of porphyrins and digoxin in actinidic archaeal neurons was tested in disorders of consciousness schizophrenia and autism.

Consciousness involves quantal perception. The wave nature of the quantal state becomes particulate when it is observed by an observer. Consciousness involves the sum total of quantal perception by the brain resulting in the observer state. The observer and observed have an inter-related existence. Thus the observer and observed comes into existence due to the quantal perceptive state of the actinidic archaeal mirror neurons. The quantal state is mediated by archaeal digoxin and the dipolar magnetite and porphyrins. Consciousness involves working memory, perceptual synchronisation and focussed attention. Focussed attention depends on magnetotactic or quantal low level of EMF perception from the world and its objects. The perceptual synchronisation depends on the phenomena of cross activation of neuronal systems due to quantal phenomena. This can also generate the phenomena of synaesthesia and synkinesia. Working memory depends upon quantal perceptive mechanisms mediated by magnetotactic actinidic archaeal neurons in the brain generating reverberatory circuits. Thus actinidic archaeal induced mirror neurons in the prefrontal cortex

and cerebellum are quantal perceptive neurons. The cerebellum is more concerned with intuition and extrasensory perception. The cerebellar neurons may be predominantly actinidic archaeal induced quantal perceptive mirror neurons. Quantal perceptive actinidic archaeal induced magnetotactic mirror neurons may be more dense in the cerebellum than prefrontal cortex and the cerebellar cortical circuits may play a major role in consciousness. Quantal perceptive mirror neurons fire in response to low level of EMF from the observed world. This quantal perceptive mirror neuron function in the cerebellum and to a lesser extent in the prefrontal cortex generates the observer as such and the observed world also by the act of observation. The world as such exists on the basis of magnetotactic archaeal mediated quantal mirror neuron function generating the observed-observer relation. Thus consciousness is a function of actinidic archaeal induced quantal perceptive mirror neurons in the cerebellum and to some extent in the prefrontal cortex.

Schizophrenia and autism are both disorders of consciousness. The actinidic archaeal induced quantal perceptive mirror neuron function is hyperactive in both disorders. This results in dysfunction of consciousness due to increase in actinidic archaeal density, digoxin synthesis and porphyrin synthesis. Perception occurs predominantly by quantal perceptive mechanism in schizophrenia and autism. This also leads to increased creativity and intuition in schizophrenia and autism. Thus the observer and observed depends on actinidic archaeal induced quantal perceptive mirror neuron function. The world as such is an illusion created by the inter-relationship between the observed and observer mediated by quantal perceptive mirror neurons. The quantal perceptive image of the world and the observer can exist as multiple possibilities in multiple universes leading to the phenomena of eternal existence in multiverse universes.

The archaeal porphyrins can modulate amyloid formation and modulate systemic disease process. The archaeal cholesterol oxidase activity was increased resulting in generation of pyruvate and hydrogen peroxide. The pyruvate gets converted to glutamate and ammonia by the GABA shunt pathway. The pyruvate is converted to glutamate by serum glutamate pyruvate transaminase. The glutamate gets acted upon by glutamate dehydrogenase to generate alpha ketoglutarate and ammonia. Alanine is most commonly produced by the reductive amination of pyruvate via alanine transaminase. This reversible reaction involves the interconversion of alanine and pyruvate, coupled to the interconversion of alpha-ketoglutarate (2-oxoglutarate) and glutamate. Alanine can contribute to glycine. Glutamate is acted upon by Glutamic acid decarboxylase to generate GABA. GABA is converted to succinic semialdehyde by GABA transaminase. Succinic semialdehyde is converted to succinic acid by succinic semialdehyde dehydrogenase. Glycine combines with succinyl CoA to generate delta aminolevulinic acid catalysed by the enzyme ALA synthase. There was upregulated archaeal porphyrin synthesis in the patient population which was archaeal in origin as indicated by actinide catalysis of the reactions. The cholesterol oxidase pathway generated pyruvate which entered the GABA shunt pathway. This resulted in synthesis of succinate and glycine which are substrates for ALA synthase. The archaea can undergo magnetite and calcium carbonate mineralization and can exist as calcified nanoforms. The possibility of Warburg phenotype induced by actinide based primitive organism like archaea with a mevalonate pathway and cholesterol catabolism was considered in this paper. The Warburg phenotype results in inhibition of pyruvate dehydrogenase and the TCA cycle. The pyruvate enters the GABA shunt pathway where it is converted to succinyl CoA. The glycolytic pathway is upregulated and the glycolytic metabolite phosphoglycerate is converted to serine and glycine. Glycine and succinyl CoA are the substrates for ALA

synthesis. The archaea and viroids can regulate the nervous system including the NMDA/GABA thalamo-cortico-thalamic pathway mediating conscious perception. Porphyrin photo-oxidation can generate free radicals which can modulate NMDA transmission. Free radicals can increase NMDA transmission. Free radicals can induce GAD and increase GABA synthesis. ALA blocks GABA transmission and upregulates NMDA. Protoporphyrins bind to GABA receptor and promote GABA transmission. Thus porphyrins can modulate the thalamo-cortico-thalamic pathway of conscious perception. The dipolar porphyrins, PAH and archaeal magnetite in the setting of digoxin induced sodium potassium ATPase inhibition can produce a pumped phonon system mediated Frohlich model superconducting state inducing quantal perception with nanoarchaeal sensed gravity producing the orchestrated reduction of the quantal possibilities to the macroscopic world. ALA can produce sodium potassium ATPase inhibition resulting in a pumped phonon system mediated quantal state involving dipolar porphyrins. Porphyrin molecules have a wave particle existence and can bridge the dividing line between quantal state and particulate state. Thus the porphyrins can mediate conscious and quantal perception. Porphyrins binding to proteins, nucleic acids and cell membranes can produce biophoton emission. Porphyrins by autooxidation can generate biophotons and are involved in quantal perception. Biophotons can mediate quantal perception. Cellular porphyrins photooxidation are involved in sensing of earth magnetic fields and low level biomagnetic fields. Thus prophyrins can mediate extrasensory perception. The porphyrins can modulate hemispheric dominance. There is increased porphyrin synthesis and right hemispherical chemical dominance and decreased porphyrin synthesis in left hemispherical chemical dominance. The increase in archaeal porphyrins can contribute to the pathogenesis of schizophrenia and autism. Porphyria can lead to psychiatric disorders and seizures. Altered porphyrin metabolism has been described in

autism. Porphyrin by modulating conscious and quantal perception is involved in the pathogenesis of schizophrenia and autism. It also plays a role in the genesis of consciousness.

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