

## Human Photosynthesis and Alzheimer's Disease

Arturo Solís Herrera\*, Jerzy Leszek, María del Carmen Arias Esparza, Ruth I Solís-Arias, Paola E Solís-Arias and Martha P Solís-Arias

Human Photosynthesis Study Center, Av. Aguascalientes Norte 607, Pulgas Pandas Sur, CP 20230, Aguascalientes, Mexico

### Abstract

More than 100 years have passed by since the first description of AD by Alois Alzheimer; however the patients are dying in the same way. Our discovery of the hitherto unknown capacity of the human body to split the water molecule breaks the paradigm. In accordance with our experience of 21 years, the signs and symptoms of AD are compatible with a generalized failure of the CNS; therefore AD is an energy problem, not a biomass trouble. In this work we are presenting the basis and results of our completely new treatment whose principles are grounded in a very different physiology: the main source of energy of the human body is water not food, in other words: the main source of energy of the CNS is the water located in the ventricles and subarachnoid space, and not through the blood vessels. Glucose is just a source of biomass, and therefore it must be absorbed from the gastrointestinal tract and then it needs to be transported to the different tissues in our organism by the blood vessels but eukaryotic cell uses glycans only as building blocks, surprisingly energy is taken from water, a very different and unknown concept. Energy comes in an unsuspected highly proportion (99%) from a similar process in plants: the water dissociation, a reaction that we appointed as human photosynthesis by their analogies with the photosynthesis of the plants. The capacity of our body to take energy from water begin to diminish at 26 years old, at rate of approximately 10 % each decade and after fifties it goes into free fall. This seems to be the natural history, however several factors are able to turning down the human photosynthesis levels, as alcohol, iron supplements, high fructose syrup, hormones, pesticides, herbicides, medical compounds with a high apparent distribution volume like antidepressants, old age, diabetes, trauma; contaminated water, etc. When the energy released by our photosynthesis system is comprised in enough amount and time, chaos sooner or later overcome. With the medical enhancement of the natural capacity of our body to split and back-bonding the water molecule, the recovery of AD patients are astonishing. In this brief presentation we will present some examples of the remarkable improvement in patients with AD treated at our Human Photosynthesis Study Center.

**Keywords:** Melanin; Photosynthesis; Chlorophyll; Hydrogen; Oxygen; Energy; Alzheimer; Glucose

### Background

Photosynthesis, from the Greek photo-, "light", and synthesis, "putting together" is a term that means builds up something with the energy or force of light. In nature exist several examples, but the most well known is in plants.

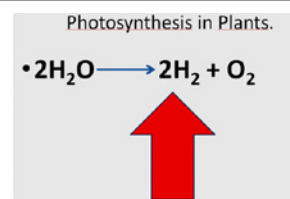
Photosynthesis is a process in which glucose ( $C_6H_{12}O_6$ ) is synthesized arising from  $CO_2$ , water and light energy. The process has light reactions and dark reactions and it's not completely understood. However, the very first reaction in photosynthesis' plants could be represented as Figure 1 and it's related with the breaking or dissociation of the water molecule in order to achieve the release of the energy necessary to impulse subsequent reactions. It is considered the most important chemical reaction in the world because is the origin of the food chain.

In brief, chlorophyll in presence of light of 400 and 700 nm and

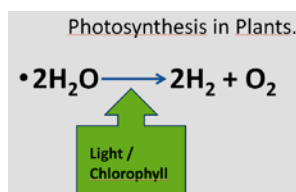
water, is able to produce diatomic hydrogen and oxygen. The product of real value is hydrogen (Figure 2) because is the energy carrier by excellence in Universe, therefore our body cannot be different.

By other side, oxygen is toxic at any level, which is the explanation why plants expelled diatomic oxygen, a very stable molecule; to atmosphere.

It is a well known scientific proposition that photosynthesis occurs only in plants, and a few other organisms, generally those that have



**Figure 2:** Hydrogen is the most important product of the water dissociation. Oxygen is a byproduct.



**Figure 1:** The very first step of life in Plants is the water dissociation. The photo-system in plants is composed by Light/Water/ Chlorophyll in order of abundance in nature. The reaction occurs only in one direction.

**\*Corresponding author:** Arturo Solís Herrera, Human Photosynthesis Study Center, Av. Aguascalientes Norte 607, Pulgas Pandas Sur, CP 20230, Aguascalientes, Mexico, E-mail: [comagua2000@yahoo.com](mailto:comagua2000@yahoo.com)

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taken on plant material, and used that plant material to continue a form of photosynthesis.

It is quite clear from the literature that the organisms which have taken on plant material are creatures such as rare varieties of sea slugs and there has never been any scientific proposition that human beings or indeed any primates or other higher life forms, are capable of photosynthesis.

These scientific facts are taught at primary school level, so most of the population will be aware of them.

## Photosynthesis in Humans

In humans, the process takes place in a similar way (Figure 3):

Melanin in presence of light (visible and invisible) and water, express its intrinsic property of split and reform the water molecule. A difference of chlorophyll, melanin has the capacity of absorbs the full electromagnetic spectrum.

The main difference in photosynthesis process between plants and humans is that melanin makes the process in both ways (Figure 4) [1].

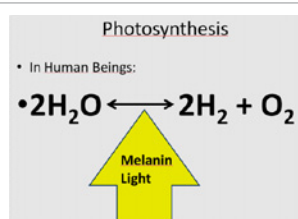
## Brief Description of the Discovery

The basic process of Human Photosynthesis was firstly observed in human retina in 1990, along a study about the three main causes of blindness, data obtained during twelve years of continued work, finally allowed us, in 2002; the understanding of the intrinsic property of melanin to split and reform the water molecule.

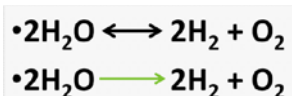
The optic nerve (Figure 5) was one of the main variables under study. Our thesis in that time was that these blood vessels could gives early clues of some of the three main causes of blindness in the world: Glaucoma, Diabetic Retinopathy and Age-Related Macular Disease.

Magnification obtained during our study of these structures were enough for our aims, detailed observation of minuscule details of capillaries in retina and optic nerve was achieved; however a new variable draw powerfully our attention: the ever-presence of melanin.

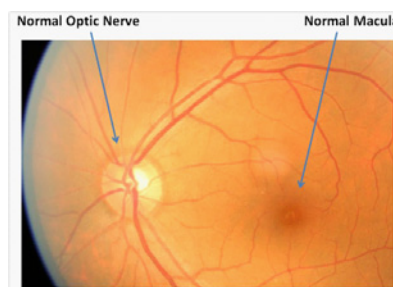
At first, melanin was just a nuisance for our scientific research, but



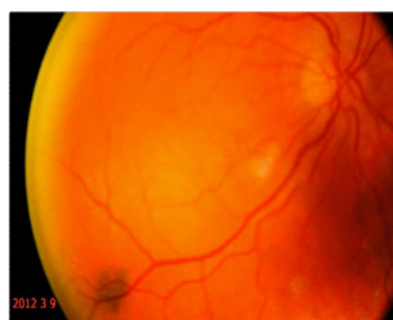
**Figure 3:** Photosynthesis process, in human beings is similar to plants, however, the reaction is in both ways and melanin, the human chlorophyll; can absorbs the full electromagnetic spectrum. Therefore our photosynthesis is more flexible (reversible) and efficient (all electromagnetic spectrum).



**Figure 4:** The big little difference, in humans melanin split and reform the water molecule, in plants, chlorophyll only split the water. The reactants and products are the same in both reactions.



**Figure 5:** Optic nerve in humans is in reality a small structure with a diameter of 1200 microns or twelve human hairs together. The macula is the zone of highest visual acuity and has 200 microns of diameter or two human hairs together.



**Figure 6:** Melanin is not easy to be observed in the average patient, and is perceived normally in exceptional cases like this, where the white arrow shows sub-retinal melanin.

three months later became the first variable under study. It was very interesting the fact that retinal blood vessels and melanin appear to have certain dynamic relationship whose explanation was not described in the literature at that time.

Practically every patient examined by our team has melanin, in spite of the ocular fund us area's considered, or even the diagnosis. And most important: retinal and choroidal blood vessels show detectable and specific morphological reactions to the presence of melanin (Figure 6).

White arrow shows sub-retinal melanin. White arrow shows sub-retinal melanin. Amount and location of detectable melanin is variable (Figure 7) and so the vascular reactions.

White stars shows melanin location in the optic nerve rim. However, in reality, the amount and location of melanin in the human eye usually go unnoticed. The inner part of the eye, is completely lined with melanin (Figure 8).

Behind the external layers of the eye, which seems of white color, melanin lined the entire inner part of the eye. The thickness of de tissue imbibed with melanin in the human eye or mean choroidal thickness is 426 µm [2] (Figure 9).

The eye is a fluid-filled sphere enclosed by three specialized tissue layers. From outermost to innermost, these are: 1.) the sclera/cornea; 2.) the choroid/ciliary body/iris; and: 3.) the retina. Traditionally, the role of melanin in the highly pigmented choroid is, as a matter of fact, totally reduced to something similar to the black walls of a photographic study, where the pigment in the choroid and retina pigment epithelium

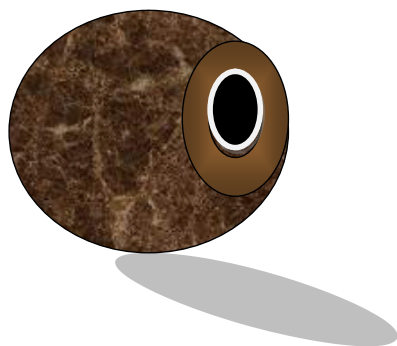
absorbs light after it strikes the retina to prevent reflection or scattering of light within the eye.

In textbooks of physiology [3], melanin is classified as a pigment which performs the protective function of absorbing harmful UV rays. However, efficiency of melanin as sunscreen (SPF) is very low: 2; melanin has the same SPF of a 2% copper sulfate solution [4].

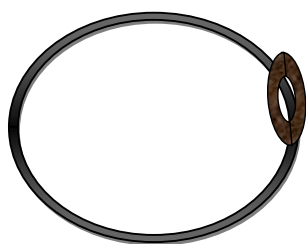
Since 1765, Le Cat first extracted the skin of a black Ethiop and found that the isolated pigment was chemically similar to those of the choroid of the eye and, notably, of squid ink [5], therefore melanin is chemically the same in all the animal kingdom and their main action: the water molecule dissociation and reformation whit consequent energy transduction and production; is the same in all the animal kingdom and in plants perhaps too; since lignin is a kind of melanin. In accordance with it, human photosynthesis may be must be appointed more exactly as mammalian photosynthesis or animal photosynthesis even; or furthermore as photosynthesis on earth; or perhaps more exactly: light/melanin/water (arranged in order of abundance in Nature) the photo-system which gives origin to the life in the earth.



**Figure 7:** The white stars shows melanin location in the temporal optic nerve rims where usual location is these clusters of melanin.



**Figure 8:** Schematic representation of the inner part of the eye, which is completely lined by melanin or more exactly by cells with high melanin content.



**Figure 9:** The thickness of de tissue imbibed with melanin in the human eye or mean choroidal thickness is 426  $\mu\text{m}$  [2].

In Europe, before the 17th century, notions about the origin of human skin color were based largely on myths and fanciful stories passed down from the ancient world. The stories focused on providing explanation for the blackness of Africans, Europeans with an ethnocentric perspective thought that it was necessary to justify the darkness of outsiders rather to explain their own paleness [6].

Blackness of Africans was considered like a disease in Europe along 17<sup>th</sup> to XIX<sup>th</sup> centuries; and in the first half of XX<sup>th</sup> century; the general biology of mammalian pigmentation appears. However, in spite of profound studies about several aspects of melanophores (in fishes and amphibians) and melanocytes (in mammals); the function of melanin was stagnated only as UV or sunscreen filter.

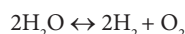
At most, the comment of G. C. Cotzias-on neuromelanins:

"The neuromelanin-granule may be the secret key to the understanding of Parkinsonism. I don't believe God put the melanin granule in the central nervous system for nothing. It must be doing something. Something big" after Procter, from CRC Handbook on Free Radicals & Antioxidants: V1(1989).

Appear as one of the most advanced point of view in regards to melanin function.

After all, in Ophthalmic and Scientific literature; we could not found enough data that could explain the interplay between melanin and retinal blood vessels observed by our team in living patients. However, in February 2002, after twelve years of continued studies; the answer of the main role of melanin finally was unraveled: Melanin is the human chlorophyll. Both molecules split the water molecule.

The principal reaction in melanin is in this way:



And was appointed by our study group as Solis-Herrera's Cycle.

Astonishing the Solis-Herrera's Cycle was a very important step in the physiology if retina, due to constitutes not only the basis of the functioning of every single cell of our own body, instead, Solis-Herrera's Cycle is nothing less than the origin of life itself.

The balance of the equation is adversely affected by cold weather, pesticides, herbicides; contaminated water; iron supplements, alcohol; anesthetic agents, pressure, temperature; advanced age, amount of light, fair skin etc.

Once time that our team understood the dynamic balance of the water dissociation/reformation (Solis-Herrera's Cycle) and their relationship with the process health/disease in our body; the search for medical agents with the intrinsic property to enhance the human photosynthesis process was intensified and the discovery of QIAPI 1<sup>™</sup> and QIAPINE<sup>™</sup> was achieved.

After a carefully preclinical evaluation; small clinical trials were started. The first success was in Ophthalmological illnesses like macular diseases (Figure 10-15) of degenerative or obscure origin.

## Material and Methods

Our Study in Alzheimer's Patients was carried out with the following general structure and organization.

The subjects studied were recruited gradually since 2002, from patients that fell attracted due to notable therapeutic results and came

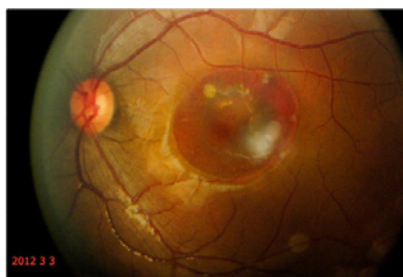


of their own volition to our Human Photosynthesis Center. The sample was not structured in a random way. The greatest parts of patients that reached our clinic have the established diagnosis of Alzheimer's disease and usually have been treated by different neurologists previously during years with poor results.

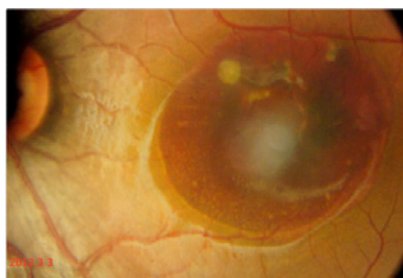
The protocol was approved by our own Ethics Committee in Research and therefore each patient has a written medical history, periodic physical examination (each six weeks in average); informed consent; type of studies to be performed if necessary; preventive measures and medical control. Psychological studies were done periodically.

Our study was not blindfolded because the size of the therapeutic effect was huge [7]. All patients received the same treatment consisting in QIAPI 1™, three drops sublingually each two hours during day time for the rest of their life.

Therapeutic results are summarized in the following chart 1:



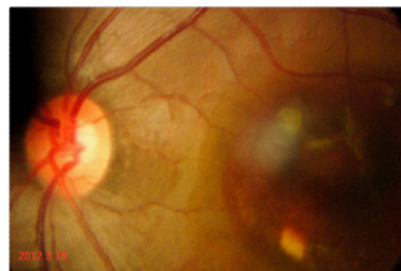
**Figure 10:** Fundus photography a female patient of 14 years old, with an unilateral unexplained vision loss of three years of evolution. At the exploration, the macular zone of the left eye is affected by a severe edema with the presence of exudates. There are not antecedents of diabetes or systemic hypertension.



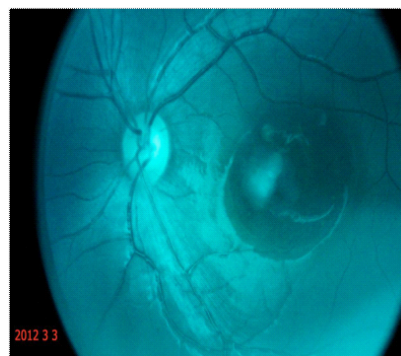
**Figure 11:** The enlargement of the figure 10 shows more details of the retinal tissue changes, edema and hyperemia.



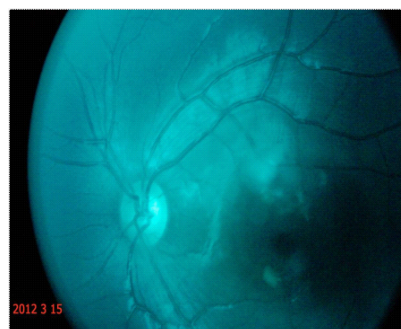
**Figure 12:** One month later of start the treatment with QIAPI 1™ to enhance the human photosynthesis, the patient shows a remarkable improvement in the edema.



**Figure 13:** Magnification of the figure 12, where some tissue changes are more evident.



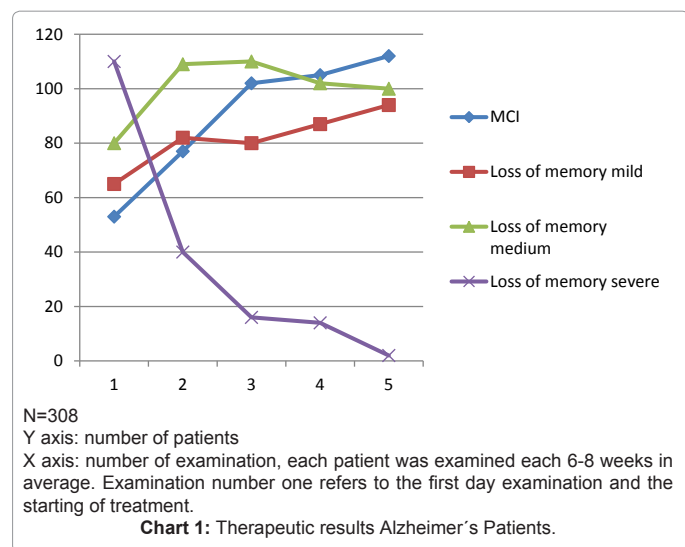
**Figure 14:** With monochromatic light of 330 nanometers, the difference in edema degree is easily detected. Figure 14 was taken at first day examination; figure 15 was taken one month later.



**Figure 15:** With monochromatic light of 330 nanometers, the difference in edema degree is easily detected. Figure 14 was taken at first day examination; figure 15 was taken one month later.

In 2002, the first year, we had only three patients of Alzheimer's disease in treatment, presently; in 2012; beside the patients under control; we have an average of three new patients each week. Our Human Photosynthesis Center is a private facility; therefore the growing patient affluence is a clear sign of the success of our treatment.

In accordance with the table of results, seems as patients with MCI, mild and medium memory loss increased and only patients with severe memory loss decreased; however, in reality; due to the number of patients with severe memory loss improve notably the numbers of this group fell, and the amount of patient with MCI, mild and medium memory loss increased as the improvement of the severe cases changes their classification to better stages therefore all patients changed gradually their classification, the severe case to medium, the



medium to mild and the mild cases changes to MCI. There was not a normal classification in our study by the inherent difficulties in the implementation of a group like that, but we think that improvement of MCI patients modify their status from MCI to normal classification.

After the treatment was started, significantly behavioral changes were noted by relatives and/or care givers during the first fifteen days. The improvement was progressive in all cases in spite of the severity of the initial clinical stage of the patient at treatment starting point. Therapeutic responses are guarded proportion in all cases, but even in advanced illness there has been a slight recovery in the patient's condition at first days, but it is becomes gradually noticeable and very encouraging. We could say that every single patient had a remarkable improvement in all mind spheres.

The patients photographed and reported in the manuscript are only few examples of treated patients at our work center.

## Results and Discussion

### Clinical case 1

Female patient, LCDL; birth date 06/03/2012; whom has a relative central scotoma in the left eye since 2007; during the first examination, in March 3, 2012; the macular area of the left eye shows severe affection, with changes as edema and exudates of sub-retinal location mainly (Figure 10). The central vision of left eye was 20/200. Beside the changes in the visual fields of left eye, the rest of examination was unremarkable. With magnification, the left macula shows chronic alterations and the anatomy distorted markedly (Figure 11).

Treatment with human photosynthesis enhancers (QIAPI 1™ and QIAPINE™) was started. Two weeks later, the second examination shows an improvement of 70 % in the central vision of left eye (20/40) with noticeable and positive changes in the anatomy, edema and exudates of the macula (Figure 12 and 13).

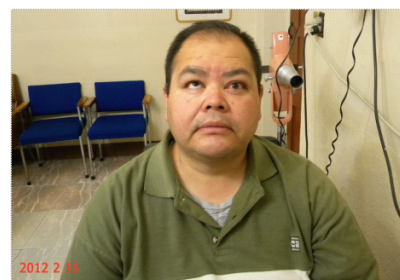
The photographs taken with Cobalt Blue Filter (Figure 14 and 15) allow to draw a comparison between the extent of the edema pretreatment and post-treatment, two weeks later with the consequent recovery of the anatomy and function of the left macula.

The patient is kept currently under the same treatment.

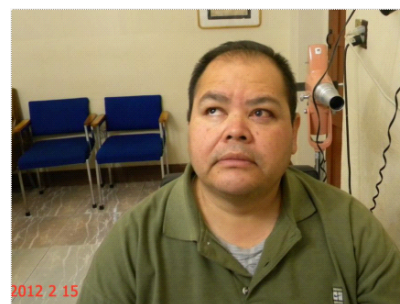
### Clinical case 2

Male patient, birth date: 24/05/1968; Diabetes since 1998, type 2; whom in September 2011, began with foreign body sensation in left eye; thereafter double vision was noted; CAT Scan of December 7, 2011 (Figure 19); shows enlargement of extra-ocular muscles of left eye therefore a diagnosis of primary inflammation of the extra-ocular muscles, in the left eye was established. After a short course of steroids, there was not improvement; so the patient came to our office by first time in February 15, 2012. During the first examination, the movement of the left eye was restricted in 70-80 %, with pain especially during attempts to reach the extreme positions of conjugated gaze (Figure 16-18). Pupils were symmetrical, intraocular pressure OD 18 mm Hg, OI 22 mm Hg. Visual fields: OD Normal, OI slight increase of the blind spot. Blood glucose was measured at 178 mg/dl. Ocular fundus examination shows scintilla scintillas in right eye and congestive changes with mild hemorrhages in left eye (Figure 20 and 21)

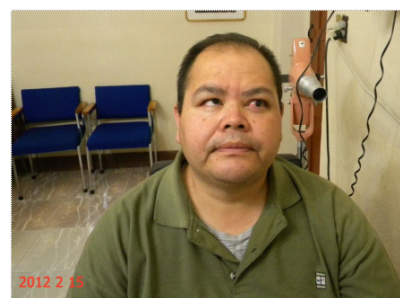
Treatment with enhancement of human photosynthesis with QIAPI 1™ and QIAPINE™ sublingual each hour during day was started.



**Figure 16:** Clinical case number 2, the upward limitation of the left eye is clearly noticed in the first day examination.



**Figure 17:** The dextroversion of the conjugated sight is partially affected.



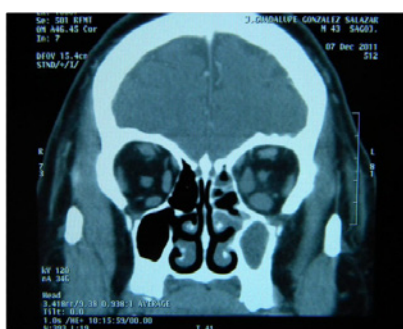
**Figure 18:** The motion of the left eye is impaired practically in all directions, notice the excursion of the right eye.



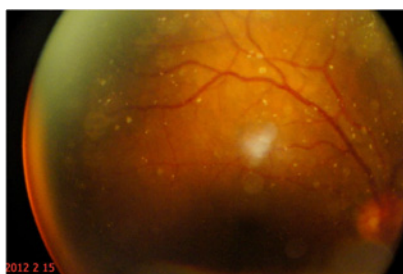
One month later, at second examination; the movement of the left eye shows an improvement of 70-80%, the pain disappear since the 15th day of treatment, therefore double vision is less noticeable, except in very extreme positions of gaze (Figure 24-26). The scintilla of the right eye and the mild hemorrhages of the left eye show substantial improvement (Figure 22 and 23)

## Human Photosynthesis and Alzheimer's Disease

In regards to central nervous system diseases, as Alzheimer's Disease; therapeutics results has been very encouraging. Our therapeutic point of view is that Alzheimer's Disease is an energy problem and not a biomass trouble [7]. Food is source of body building-blocks; with meals our body makes skin, nails, muscles, hair;



**Figure 19:** In the CAT Scan, the difference in the gross of the extra ocular muscles is marked. The muscles especially affected are the medial rectus and the inferior rectus.



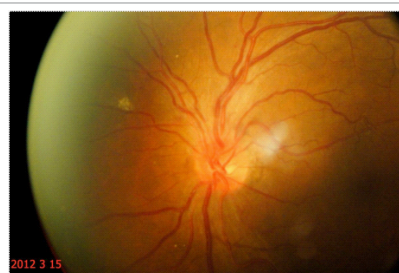
**Figure 20:** The ocular fundus of the right eye of the patient 2 is normal, however, the vitreous body shows numerous calcium concretions; and is logical, because the human photosynthesis processes have a high affinity for calcium, perhaps one thousand times or more than any other body tissue, excepts the bone, but there is deposited in mineral form. Therefore these vitreous calcium concretions are sign of low level photosynthesis. The photograph was taken at first day of examination.



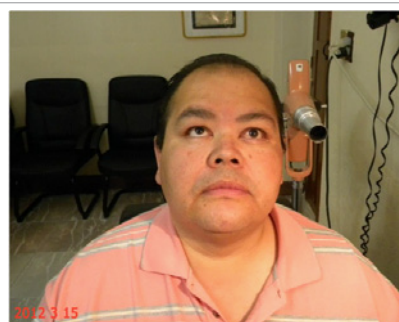
**Figure 21:** The ocular fundus of the left eye of the patient number 2, where the papilla shows compression signs as edema and hemorrhage and some small choroidal folds. Photograph was taken at first day of examination.



**Figure 22:** Photograph taken one month later of patient number 2. The right eye shows the vitreous concretions diminished and also the retinal venous congestion is improving.



**Figure 23:** The aspect of the optic nerve of the left eye of the patient number 2 shows a remarkable improvement, edema and hemorrhage disappeared and the choroidal folds are diminished.



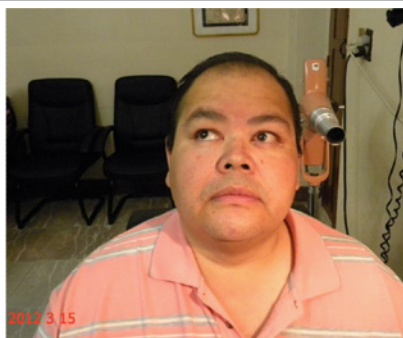
**Figure 24:** The motility of the left eye shows a good recovery with just one month of treatment.

membranes, cellular organelles; nucleic acids; etc. However the energy is taken from water. Energy is defined as those that produce some kind of change, a movement, an attraction, etc. Energy can be manifest in several manners.

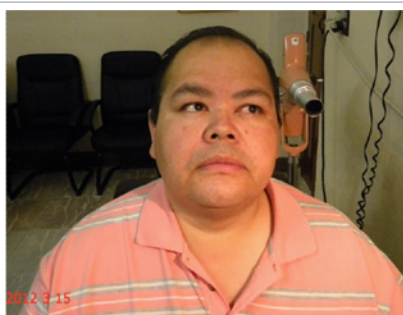
Therefore glucose is not a source of energy; it is only a very important source of biomass, but only biomass, not energy at all. Otherwise diabetic people should be a very stronger person and the reality is totally opposed.

Our finding of the unsuspected capacity of human eukaryotic cell to uses water as source of electrons breaks the paradigm: Water of the CSF is the main source of energy of the central nervous system; bloodstream is only source of biomass (Figure 27).

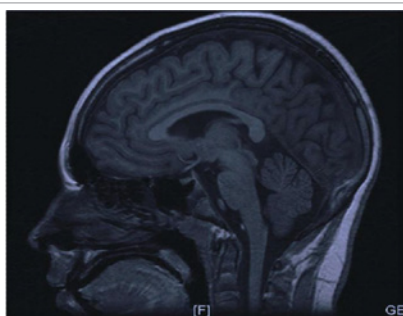
The anatomy of the central nervous system and specially the fissures of the cerebral cortex are congruous with our theses. Traditionally the fissures has been explained at light of space issues, the cerebral cortex was struggled by nature by reasons of the intracranial space available;



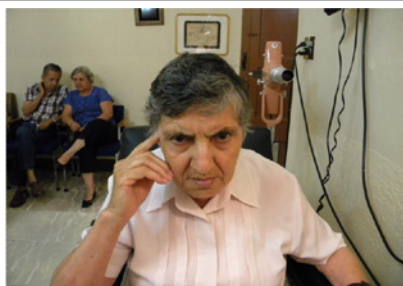
**Figure 25:** The excursion of the left eye is almost normal within one month of treatment.



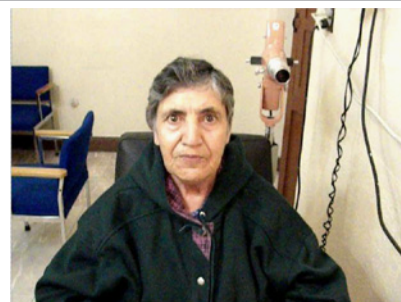
**Figure 26:** The restrictions of the ocular motility are noticeable less than one month ago.



**Figure 27:** The real source of energy of the Central nervous System is the water contained in the CSF. Therefore the main aim of the sulci of the cerebral cortex is to keep in close contact the source of energy (water and/or CSF) with every inch of neuronal tissue. So it's very important the presence of water in the inner (ventricles) and outer (subarachnoid space) part of the CNS.



**Figure 28:** Alzheimer patient during the first day of examination. The aggressiveness is characteristic. The photograph was taken at first day of examination.



**Figure 29:** The same patient of the figure 28 six weeks later.



**Figure 30:** Alzheimer patient with the characteristic aggressiveness at first day of examination.

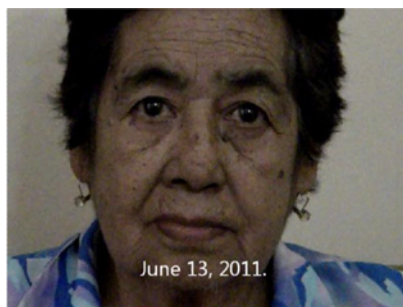


**Figure 31:** The same patient of the figure 30 six weeks later.



**Figure 32:** Alzheimer's patient with a severe depression and with diagnosis since 2007. The patient was examined by first time in December 15, 2010.

however the main reason of the fissures of the cerebral cortex is due to the needs of every neuron cell to be in close contact to the real source of energy: the water of the CSF. Therefore the main source of energy of the central nervous system is represented by the CSF located in the ventricles and subarachnoid space and not by the blood vessels.



**Figure 33:** Six months later, the improvement is dramatic. Therefore our therapeutic thesis that Alzheimer's disease is an energy problem and not a biomass problem gives very encouraging results.

### Clinical Cases of Alzheimer's Disease

The first photography was taken from female patient in the 8th decade of life, with Diagnosis of Alzheimer's Disease of 5 years of evolution during the first examination (Figure 28). The second photography (Figure 29) was taken six weeks later after the starting of treatment with QIAPI 1™ and QIAPINE™, at doses of three drops each two hours, sublingual, during day [5].

The second case (Figure 30 and 31) of Alzheimer was of female patient, in the 70th decade of life, which requires nursing during 24 hour at day. The first photography (Figure 30) was taken at first examination; the second one (Figure 31) was taken six weeks later, after the starting of the treatment with QIAPI 1™ and QIAPINE™ given at doses of three drops each two hours during day, sublingual application.

The third case of AD is in a female patient, aged 80; with Alzheimer's Diseases diagnosed since 2007. The photography (Figure 32) was taken at time of first examination, December 2010; and the second photography (Figure 33) was taken six months later, in June 2011; lapse during which the patient received in a constant manner

the treatment to enhance human photosynthesis: QIAPI 1™ and/or QIAPINE™ at doses of three drops, sublingual; each two hours during day.

### Conclusion

The unsuspected capacity of melanin to split and reform the water molecule breaks the ground. Glucose is not a source of energy; it is merely a source of biomass; in reality glucose is only a very important metabolic intermediate. Our body has the astonishing capacity to take energy from water. This hitherto unknown property of eukaryotic cell is awe-inspiring. The origin of life can be explained from now in ahead in scientist basis.

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