ECRONICON OPEN ACCESS

EC NEUROLOGY
Mini Review

The Proper Function of Pineal and Thymus Glands to Control Foreign Organisms Acting on Human Brain Subjects

Photios Anninos[1]*, Adam Adamopoulos[1], Nicolia Anninou[1], Ioannis Tsagas[1] and Nicolaos Tsagas[2]

[1]Laboratory of Medical Physics, Department of Medicine, School of Health Sciences, Democritus University of Thrace, University Campus, Alexandroupoli, Greece

[2]Departnent of Electrical Engineering, Engineering Faculty, Democritus University of Thrace, Greece

***Corresponding Author**: Photios Anninos, Emeritus Professor, Laboratory of Medical Physics, Department of Medicine, School of Health Sciences, Democritus University of Thrace, University Campus, Alexandroupoli, Greece.

Received: May 06, 2020; **Published:** May 20, 2020

DOI: 10.31080/ecne.2020.12.00704

Abstract

Using MEG studies and external pT-TMS in patients with different brain disorders and depending, on the proper functions of the pineal and thymus glands, which are producing the proper antibodies in the blood plasma serum, it is possible to overcome any brain disorder and foreign organisms acting on human brain.

Keywords: *MEG; pT-TMS; Pineal and Thymus Glands; Antibodies*

Introduction

Experimental evidence indicates that the pineal gland (PG) (Figure 1) exerts general homeostatic control on the central nervous system (CNS). This effect is thought to be mediated through the action of melatonin on the hypothalamus [12], cerebellum [12], thymus gland [13], reticular formation [16], substantia nigra [14], hippocampus [15]. The thymus gland (Figure 2) secretes a hormone called thymosin, which aids the development of white blood cells called T cells. The T cells help protect the body against infection by foreign organisms by the five immunoglobulins actions [13]. This provided that the PG is not calcified because that reflects to decreased in melatonin secretory activity [18].

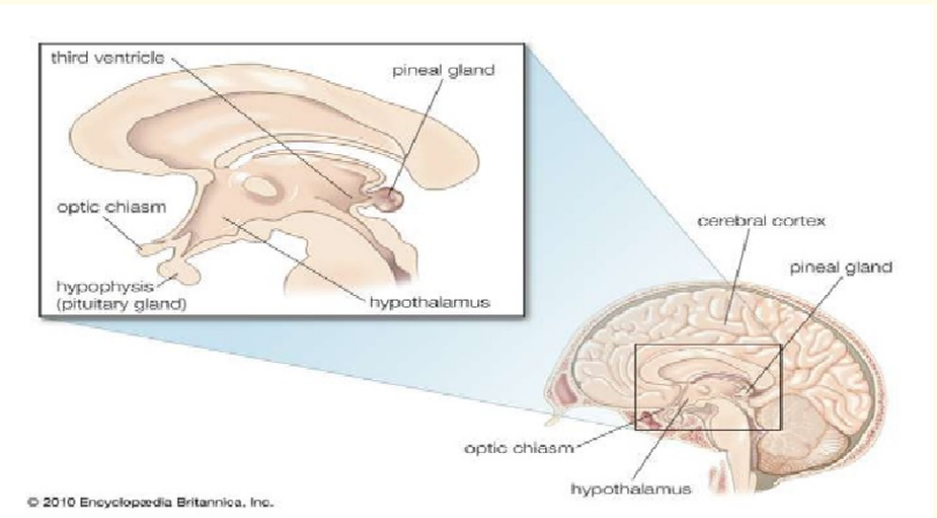

Figure1: *The Anatomy of pineal gland.*

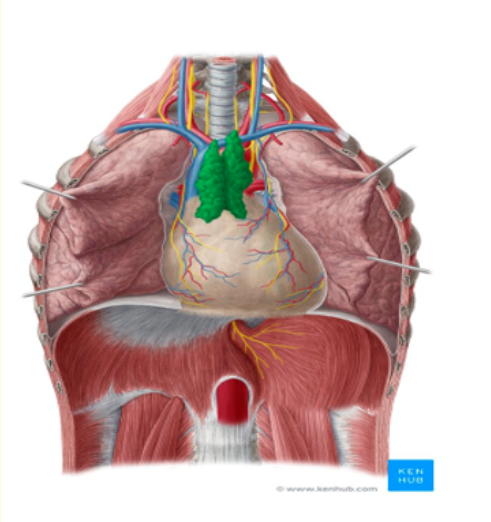

Figure2: *The Anatomy of thymus gland.*

In addition, the role of PG is as regulator of thymus gland [13]. It was investigated by the Computing Tomography (CT) scan that the PG calcification (PC) (Figure 3) reflects the decreased of its secretory activity [17,20]. Several studies have proposed that the PG [19], depending of the PC, the melatonin secretion levels are decline depending also on the age of the subject.

Figure3: *The calcification of pineal gland and choroid plexus.*

The above-mentioned immunoglobulins [13], which also called antibodies, are glycoprotein molecules that make up an important part of the immune system and as it was stated above are responsible for fighting foreign organisms generally.

These antibodies abbreviated as "Ig" are IgA, IgD, IgE, IgG and IgM, help to destroy foreign bacteria, parasites and various viruses. These antibodies are symmetrical Y-shaped molecules consisting of two longer heavy (H) chains and two shorter light (L) chains which interact with each other via either disulfide(S-S) bonds or hydrogen bonds. In addition, according to [13] these antibodies can also be separated into constant(C) and variable (V) portions. The C portions direct activities in which all or most immunoglobulins participate, while the V portions bind to specific antigens (i.e. proteins that signal the presence of a particular bacteria or virus).

Examining each one of these immunoglobulins it can be found that the IgA accounts for about 15% of the antibodies in the human system, making it the second most common type of immunoglobulin and only 6% is found in the blood serum and is as single molecule in a Y shape as it was stated before.

Furthermore, the IgA has a half-life of five days and has a total of four sites at which to bind antigens. These sites are called also epitope-binding sites and as such are the invader that triggers an immune reaction.

The IgD is the rarest of the five classes of immunoglobulins making up approximately 0.2% of the serum antibodies and has two epitope-binding sites. Furthermore, it is believed to control B-lymphocyte activation and suppression in response to signals from other immunoglobulins which are circulating in the blood plasma.

The IgE accounts for only about 0.002% of serum antibody from all immunoglobulins, but it plays a vital role in the immune response, and has two antigenic binding sites, one on each "arm". It has a short half-life of two days. It is bound to mast cells and basophils, which circulate in blood. It takes part in multicellular invaders. In addition, the IgE enables IgG, which are proteins from the complement pathways, and white blood cells to enter tissues to confront invaders.

The IgG is the dominant antibody in the human body, accounting for the 85% of all immunoglobulins and has half-life of seven to 23 days. The IgG was found as the monomer in the blood and lymph. It has the unique ability to cross placenta in pregnant women, allowing it to protect the unborn fetus and newborn baby. It has the ability to neutralizing toxins and inactivating viruses and killing bacteria. This gives IgG a white variety of functions, so that to be prevalent in the system.

Finally, the IgM is the colossus of immunoglobulins. It exists as a group of five bound IgM monomers. It has a short half-life about five days and makes up approximately 13% - 15% of serum antibodies. Importantly, it is also the first line of defense among the four antibody siblings. It has 10 epitope-binding sites making it fierce adversary. The IgM can also activate the complement-protein pathway and is the most efficient type of antibody. It is interesting that our body produce IgM by the age of nine months provided that the PG is not calcified and it's function regulate properly the thymus gland.

From the above it can be seen that among of the 5 immunoglobulins important are the IgG and the IgM in terms of the half-life, their percentage in the plasma serum antibodies for neutralizing toxins and activating viruses and killing bacteria and their epitope-binding sites.

All these depend on the regulation of PG to the thymus gland function. This regulation depends on the calcification of the PG (Figure 1) as is indicated in figure 3. This calcification is reducing melatonin secretion [18] which regulates also the thymus gland (Figure 2) which has the function to develop the T cells which helps protecting the body against infection by foreign organisms, generating the five immunoglobulins actions [13].

Thus, in this point is important to referred to the USA patents for the decalcification of the PG by [7] and the construction of the electronic device by [11] which is based on the previous USA invented patent. This patent was approved by the USA, after the Greek neurologists which they referred the above patients to get the external magnetic stimulation with our electronic device, gave an oath in

presence of the USA Consular in Thessaloniki Greece. From the above it is clear that in order to confront the action of the body against infections by foreign organisms it is important to have a decalcified and good function of the PG which properly regulates the thymus gland which is responsible for the production of the T cells and the proper Immunoglobulins antibodies.

Unfortunately, due to the restrictions to stay at home due to the virus it was not possible to test our hypothesis using patients infected with various foreign viruses. However, from the time that I was elected as Associate Professor of neurology in 1985 and later in 1988 as full Professor and director of Medical Physics in the School of Medicine of Democritus University of Thrace in Alexandroupolis, Greece, I had the opportunity to apply our method and examined patients more than 500 with different brain disorders as for example, epilepsy, Parkinson's disease, multiple sclerosis, Alzheimer's disease, autism, depression and migraine. These patients were coming from different parts of the world (England, Germany, USA, Australia, Canada, Thailand and other countries). In order to consider all these patients we had informed consent for the methodology and the aim of the study prior to the procedure. I was also have the approval of the Research Committee of our University in order to perform biomagnetic measurements of the brain (MegnetoEncephaloGram-MEG) with the SQUID for diagnostic purposes. This was funded by the GGET (General Secretarial of Research and Technology, GR). Using pico-Teslsa Transcranial Magnetic Stimulation (pT-TMS) on these patients we have seen an effect in the range of 55 - 75%. In addition, we have noticed that the success effect to these patients was of using different brain disorders. These results have been published in the international peer review journals [1-11] as it can be seen in our below listed Bibliography

Conclusion

In conclusion, from the above results it was possible to conclude that with our method, provided that the PG is properly function, producing the melatonin hormone, which acting in different brain centers and in particular to regulate the thymus gland, for producing the proper antibodies in the blood plasma serum, it is possible to overcome any brain disorder and foreign organisms acting to the human brain. However, more studies including patients with different disorders are needed in order to have more effective results.

Bibliography

1. Anninos P., *et al*. "The Effect of pT-TMS on Beta Rhythm in Children with Autism Disorder A MEG Study". *Maedica (Buchar)* 14.4 (2019): 332-342.

2. Anninos P., *et al*. "MEG recordings of patients with cerebral palsy before and after the application of pico-Tesla weak magnetic fields". *Journal of Integrative Neuroscience* 18.1 (2019): 17-21.

3. Photios Anninos., *et al*. "Frequency Analysis from the effect of Pico Tesla Transcranial Magnetic stimulation in Migraine Patients Using". *Magnetoencephalography* 10.11 (2018): 1029-1036.

4. Anninos P., *et al*. "MEG Study of Pico-Tesla Trancranial Magnetic Simulation on Patients with Depression". *EC Neurology* 5.3 (2017): 115-122.

5. Anninos P., *et al*. "MEG evaluation of pico-Tesla external TMS on multiple sclerosis patients". *Multiple Sclerosis and Related Disorders* 8 (2016): 45-53.

6. Anninos P., *et al*. "Combined MEG and pT-TMS study in Parkinson's disease". *Journal of Integrative Neuroscience* 20 (2016): 1-18.

7. Anninos N and Tsagas I. "A patent for strengthening the immune system USA Patent 7,258,659" (2007): 258-659.

8. Abatzoglou I., *et al*. "Magnetoencephalographic analysis and magnetic stimulation in patients with Alzheimer disease". *Gazzetta Medica Italiana Archivio per le Science Mediche* 163.5 (2004): 165-171.

9. Anninos P., *et al*. "Magnetic stimulation can modulate seizures in epileptic patients". *Brain Topography* 16.1 (2003): 57-64.

10. Anninos P., *et al*. "Nonlinear Analysis of Brain Activity in Magnetic Influenced Parkinson Patients". *Brain Topography* 13.2 (2000): 135-144.

11. Anninos PA and Tsagas N. "Electronic apparatus for treating epileptic individuals USA Patent 5453072" (1995).

12. Anton-Tay F. "Melatonin: effects on the brain function". *Advances in Biochemical Psychopharmacolgy* 11 (1974): 315-324.

13. Csaba G. "The Role of Brain –Pineal –Thymus System in the Determination of Lifespan: The Autoimmune Aging Theory". *Advances in Neuroimmune Biology* 6.3-4 (2017): 139-148.

14. Kopp N., *et al*. "Evidence for the presence of melatonin in human brain". *Neuroscience Letters* 19 (1980): 237-242.

15. Ok Kyu Park., *et al*. *Neurological Sciences* 294.1-2 (2010): 7-17.

16. Pazo JH. "Effects of melatonin on spontaneous and evoked neuronal activity in the mesencephalic reticular formation". *Brain Research Bulletin* 4 (1979): 725-730.

17. Pelham RW., *et al*. "Twenty-four-hour cycle of a melatonin-like substance in the plasma of human males". *Clinical Endocrinology* 37 (1973): 341-344.

18. Sandyk R and Kay SR. "Pineal melatonin in schizophrenia: A review and hypothesis". *Schizophrenia Bulletin* 16 (1990): 653-662.

19. Silman RE., *et al*. "Melatonin, the pineal gland and human puberty". *Nature* 282 (1979): 301-303.

20. Trentini GP., *et al*. "Pineal calcification in different physiopathological conditions in humans". In GP Trentini, C. de Gaetani and P. Pevet (Eds). Fundamentals and clinics in pineal research". New York: Raven Press (1987): 291-304.

Volume 12 Issue 6 June 2020