Editorial
Άρθρο σύνταξης

Biological non pharmacological treatments in current psychiatry

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Up until the initiation of the first effective psychiatric medication in the 60s, the only available treatments in psychiatry were the so called "psysiodynamic" treatments. Of those treatments, only one remains in use, after being extensively modified, namely ECT. Insulin coma disappeared, non electric stimulation techniques (such as "polarization" and carbon dioxide) are now completely forgotten and lobotomy was abandoned due to its harmful abuse especially in the US.[1] "Electroshock" was targeted by anti psychiatric and religious groups as no other treatment in psychiatry. However, despite the acute decline in its use, this method survived due to its superior effectiveness and satisfactory safety. Electroshock survived only because a group of scientists "adopted" it and established the scientific background and efficacy of the treatment, increased its safety profile and defined the indications of use, published repeatedly guidelines on its use and clarified to everyone that the treatment now called Electroconvulsive Therapy (ECT) is used only for therapeutic reasons when indicated following strict procedures. Nonetheless, it didn't manage to fight the stigma that historically has followed the treatment. The increase in its use since the 90s is mostly related to financial reasons due to the speed of recovery and the steadily high effectiveness of the method, its increased safety that allows the use in outpatients and the favorable -compared to medication- safety profile in special populations like the steadily increasing elderly population.[2] However, even today ECT faces new challenges in US as, despite the abundance of data supporting its safety, anti-psychiatric groups force for the re-evaluation of ECT devices safety.[3]

While ECT was improved as a treatment, new experimental neuromodulation techniques are developed suggestive of the intense research interest in the biological non pharmacological treatments in psychiatry. Two of them are approved by Food and Drug Administration in US (FDA)[4] for the treatment of depression: light therapy for the treatment of seasonal depression[5] and, repetitive Transcranial Magnetic Stimulation (rTMS) for the treatment of moderate depression.[6] rTMS uses magnetic field to produce sub-convulsive stimulus and thus general anesthesia is not required. Both techniques use is sub-optimal in Greece although they are safe and simple in use.

The successful use of modern surgical techniques in neurology, revive the interest of their tentative use in psychiatry as well. They are used in psychiatry in the treatment of chronic Treatment Resistant Depression (TRD). Vagus Nerve Stimulation (VNS) -the only surgical procedure approved by FDA as adjunctive treatment in TRD[7] while, despite the promising data of the DBS use in the treatment of TRD in open labeled studies, the two double blinded randomized studies approved by FDA in US were discontinued after failing the futility analysis.[8] The failure of the studies to differentiate DBS group from control group was related to design defaults rather than to the treatment itself.

In Greece, ECT and recently-rTMS and Light Therapy use is limited. Despite its use for years data on the ECT use were not available until 2009 when the first survey on the ECT use was conducted by the University of Athens.[9] Data were rather discouraging. The decline in ECT use was never followed by a revival as in US. Instead, ECT is gradually abandoned and even when it is used, guidelines are not strictly followed. The limited ECT use and the average quality of the procedure when provided, is related to limited training, unavailability of anesthesiologists and the low reimbursement for the treatment paid by insurance companies.

However, we strongly believe that in the current financial crisis, the use of biological non pharmacological treatments available in Greece –especially ECT use– should be reconsidered, since it can offer immediate relief of symptoms with limited/mild side effects in a considerable number of patients with unmet needs and limited, if no other, therapeutic options. For milder cases light therapy is a cost effective, simple, treatment that can be applied at home using portable device. It can be used alone or in combination with medication (accelerating the onset of the antidepressant effect) in moderate –especially seasonal– depression, in bipolar depression and in depression during pregnancy where the use of antidepressants can be controversial. rTMS is more expensive treatment and it can be used in hospitalized patients or outpatients. ECT however, is superior in severe and

refractory depression especially when psychotic symptoms are present. There are severely ill patients in need of ECT as it may be the only effective treatment that may suffer severe complications of the untreated depression if the treatment is not available. The use of ECT requires training, experience and strict compliance with the guidelines in order to be safe and effective. Nonetheless, the lack of these requirements should not restrict its availability in public hospitals since it is a simple, safe and non invasive treatment. At last, DBS, even if it is used for the treatment of neurological treatments in Greece, it is not used in psychiatry due to the lack of trained psychiatrists to treat the patient and adjust the parameters of the implanted device.

As a conclusion, psychiatric patients have rather unjustifiably limited access to current biological, non pharmacological treatments and we strongly believe that the residents training and the increased use in psychiatric hospitals will increase the available therapeutic options increasing the overall effectiveness of psychiatric interventions in the treatment of depression and would meet the unmet needs of special populations.

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