



TRANSCRANIAL MAGNETIC STIMULATION: AN EMERGING SIGN OF RELIEF FOR PSYCHIATRY IN DEVELOPING WORLD

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Transcranial Magnetic Stimulation (TMS) is a non-invasive method which generates electromagnetic waves to stimulate specific area of the brain by placing insulated coil over the scalp. These electromagnetic inductions work on the principle of magnetic resonance imaging studies. The brief and pulsatile magnetic pulses generated by the coil passes easily and painlessly into the brain through the skull. The pulses administered in rapid succession known as "Repetitive TMS" or "rTMS, produce long lasting changes in the activity of the brain¹. TMS has been proved a safest and effective treatment particularly for those on whom antidepressants do not work effectively^{2,3}.

The resource constraint for any long therapy in developing world is a major issue to handle as compared with developed world. Although ECT (Electroconvulsive Therapy) is considered an extremely effective treatment particularly for major depressive disorders but there are certain feelings of distress related to it⁴. The unpleasant experiences, high cost and cultural taboo related to ECT treatment more commonly known as shock therapy to laymen are major hurdles in introducing and maintaining treatment adherence⁵.

Besides above fact, largely downtrodden class found victim of mental state disorder with meager financial resources is a challenging issue which can't be ignored⁶. In such a dreadful scenario, a treatment modality like TMS which has limited side effects as compared with already applied treatments is definitely a blessing need to be explained for promotion on a massive scale^{7, 8}. It would not only benefit patients in relieving them from excessive cost of procedures (anesthesia and pre procedure work ups) but also from side effects of anti depressants and ECT as well^{9,10,11}.

TMS is proving definite edge over other treatment modalities on psychiatric patients. This therapy is convenient to administer with low side effects. It has been proved a very positive treatment modality for mental ailments and it also seems to continue with trust for longer time. The low cost proposition of this treatment will attract and spread its eminence. TMS is blessing in disguise to psychiatric world and revolutionary outcome of in-depth research work done by elites in this field which will go a long way in improving quality of life of toiling patients of psychiatric ailments on a large scale.

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