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Multifocal Repetitive Transcranial Magnetic Stimulation – a Novel Paradigm in Migraine Treatment

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Transcranial Magnetic Stimulation (TMS) is a non-invasive brain stimulation method used for analyzing structural and functional interactions in brain, assess cortical reactivity, and map functionally relevant brain regions inducing a controlled current pulse in a defined region of the cortex. From a clinical point of view, TMS has shown promising results in the therapeutic approach in a large number of psychiatric and neurological conditions such as anxiety, depression, OCD, headache disorders - migraine being one of the most encountered, etc. In patients with migraine, the pharmacologic therapy can be divided in abortive and preventive treatment of the attack. Usually the treatment is started with simple analgesics and non-steroidal inflammatory; nevertheless, many individuals continue to have attacks refractory to various prophylactic and/or abortive therapies, while others are at high risk of developing medication overuse headache. Among non-pharmacologic therapies TMS has been broadly studied as a preventive migraine treatment with good outcome results.