Vagal nerve stimulation (VNS) may be an option in patients with depression with insufficient response to trials of pharmacotherapy but consider that parameters used for the treatment of epilepsy may differ from those used for the treatment of depression.

RECOMMENDATION LEVEL: WFSBP = 5; ILAE = U CONS

Despite a large number of studies has investigated the effect of VNS on symptoms of depression in people with epilepsy, no studies have investigated the efficacy of VNS on patients with epilepsy and a diagnosis of depression at baseline as the primary outcome. In general, the electrical "dose" is lower for depression than for refractory epilepsy but no protocols are available (48).

Repetitive Transcranial magnetic stimulation (rTMS) may be an option in patients with depression with insufficient response to trials of pharmacotherapy but consider that parameters used for the treatment of depression may differ from those safely used in people with epilepsy.

RECOMMENDATION LEVEL: WFSBP = 5; ILAE = U CONS

Repetitive transcranial magnetic stimulation (rTMS) is FDA approved for depression (49). Treatments are usually delivered at 120% of the motor threshold over the left dorsolateral prefrontal cortex, which is defined as a target 5 cm anterior to the motor threshold target of the primary motor cortex. A frequency of 10 Hz is used, and pulses are clustered into 4-second trains (10 pulses/s × 4 s = 40 pulses per train), for a total of 3,000 pulses per session (48). However, data in people with epilepsy and depression about safety and efficacy are lacking.

7.8 PSYCHOLOGICAL INTERVENTIONS

Psychotherapy should be considered as an initial treatment modality for patients with mild depression. Furthermore, psychotherapy is recommended in combination with antidepressants for patients with moderate to severe depression and for patients who have had only partial responses to antidepressant medications or who have had problems with adherence to antidepressants. Patient preference for antidepressant medications or psychotherapy and the availability of psychotherapy should be considered when deciding between initiating treatment with antidepressants or psychotherapy.

RECOMMENDATION LEVEL: WFSBP = 3 ; ILAE = C

Cognitive behavioral therapy seems to be the psychological intervention with the best evidence in people with epilepsy and mild to moderate depressive symptoms (**Table 1**). This is further supported by a recent ILAE report on psychological interventions (50).