

## DONEPEZIL-INDUCED EPILEPTIC SEIZURES - A CASE REPORT

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**Introduction:** Donepezil, a centrally acting acetylcholinesterase inhibitor (AChEI), is approved for symptomatic relief of cognitive impairment in patients with Alzheimer's disease and Vascular Dementia (VD). Several adverse effects were reported and the most common are gastrointestinal disturbances. Others include bradycardia, agitation and confusion. Although epileptic seizures are listed as a side effect, there are few reports.

**Objectives:** To present a case-report of donepezil-induced epileptic seizures and a review study regarding the theme available in *Medline*.

**Aim:** Brief literature review.

**Method:** A case report is presented and literature of this theme shortly reviewed.

**Results:** The case involves a 62-year-old female diagnosed with VD 6 months previously. Her medical history included a cerebrovascular accident 24 months earlier. She started the treatment with donepezil 5 mg and 48 hours later she was admitted in the Emergency with convulsions. She was unconscious for 20 minutes with urinary incontinence and bitten tongue. Normal blood analyses. A contrast brain CT showed a mild degree of cortical atrophy without new structural lesions. EEG showed mild and diffuse neuronal dysfunction with no grafoelements indicative of epilepsy. Donepezil was discontinued, no therapy was instituted and the patient has been convulsion free.

**Conclusions:** The mechanism of convulsive action of AChEIs isn't clear. There are reports about centrally acting AChEIs inducing convulsions in patients with Dementia without any underlying neurological condition. Further research is needed to delineate the frequency of this effect and to extend our knowledge of the underlying pathophysiological mechanism in order to determinate the safety profile of AChEIs.