



Anti-Epileptic Medication: Side Effects on Adult Patient's

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DESCRIPTION

The definition of epilepsy requires at least one seizure and evidence of persistent changes in the brain, which increases the likelihood of seizures in the future. An epileptic seizure is a transient occurrence of signs and/or symptoms caused by abnormally excessive or synchronous neuronal activity in the brain. Men are more commonly affected than women. Seizures are categorized by the International League Against Epilepsy (ILAE) Commission on Classification and Terminology into: Focal seizures, which can be further classified as having motor, sensory, autonomic, cognitive, or other features; Generalized seizures, which can be further classified as: Absence (Typical, Atypical), Tonic-Clonic, Clonic, Tonic, Atonic, Myoclonic; and types, which can be either focal or generalized, or unclear (Epileptic spasms). In most surveys, about 60% of cases of epilepsy will have no known cause. Electroencephalography (EEG) and neuroimaging are the main investigations of a patient with suspected epilepsy [1]. Managing patients with epilepsy is both difficult and rewarding; the main objective of AEDs therapy is to stop seizures without causing side effects. Sodium valproate (valproate) and carbamazepine have been the medications for epilepsy since from 1960s and 1970s. A new set of objectives for the treatment of seizures has been established as a result of the introduction of new AEDs and the greater focus on optimizing the quality of life for epilepsy patients.

These objectives have changed from total seizure control, regardless of any adverse effects, to enabling epileptic patients to live lives that are compatible with their talents [2]. Following a new epilepsy diagnosis, selecting an AED can be challenging and dependent on a number of factors, including the patient's age, co-morbidities, concurrent medications, potential for pregnancy, and epilepsy categorization. One medicine is typically used in the beginning stages of treatment at a modest dosage. The dose is then gradually raised. Most individuals' epilepsy subsides over years, and medication may be tapered off gradually. Carbamazepine, ethosuximide, gabapentin, lamotrigine, levetiracetam, oxcarbazepine, phenobarbital, phenytoin,

primidone, tiagabine, topiramate, valproate, and zonisamide are the main antiepileptic medications used to treat people with epilepsy. AED user's reported health issues which are referred by number of names, known as "adverse events," "adverse effects," "side effects," and "adverse medication reaction." Although they are not synonymous, these phrases are most frequently used [3]. The World Health Organization (WHO) defines an adverse drug reaction as "a response to a harmful and unexpected drug and it occurs at a dose that humans typically use to prevent, diagnose, or treat disease or change physiological functions." The terms "adverse reaction" and "adverse effect" are synonymous, but an adverse effect is seen from the point of view of the drug, whereas an adverse reaction is seen from the point of view of the patient. The tendency for recurring seizures that characterize the relatively frequent disorder known as epilepsy is caused by a disruption in the distribution of the cortical neurons' electrical discharge. When there is no underlying cause, epilepsy is either idiopathic or secondary, such as brain tumors or stroke. Generalized and localized seizures can be categorized clinically into two fundamental groups. Anti-epileptic medications can control the condition in up to 80% of epilepsy sufferers. The type of drug prescribed is determined by the type of seizure, the underlying cause of epilepsy, the patient's age, potential side effects, and the drug's availability [4]. Typically, a modest dose is used at first, and then the dose is gradually increased.

For the treatment of focal and tonic-clonic seizures, phenytoin is effective. For the treatment of focal and generalized tonic-clonic seizures, carbamazepine is effective. Phenobarbital is equally effective for the treatment of focal and generalized tonic-clonic seizures as phenytoin and carbamazepine. Sodium valproate, on the other hand, benefits for all sorts of epilepsy patients. In the starting stage of therapy, side effects are unrelated to dose but are noticeable (especially with carbamazepine and valproic acid), although they gradually fade as tolerance builds. Because of this, therapy using these medications should begin with low dosages and be gradually increased to the recommended maintenance dose over a period of several weeks [5]. Epilepsy has a variety of negative impacts on a patient's general well-being or subjective Quality of Life (QOL). Multiple factors are linked to QOL in

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Received: 03-Aug-2022, Manuscript No. CPECR-22-17985; **Editor assigned:** 08-Aug-2022, Pre QC No. CPECR-22-17985 (PQ); **Reviewed:** 22-Aug-2022, QC No CPECR-22-17985; **Revised:** 29-Aug-2022, Manuscript No. CPECR-22-17985 (R); **Published:** 05-Sep-2022, DOI: 10.35248/2161-1459.22.12.325.

Citation: Jenifer V (2022) Anti-Epileptic Medication: Side Effects on Adult Patient's. J Clin Exp Pharmacol. 12:325.

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epilepsy. Clinical variables (such as seizure frequency, intensity, disease duration, treatment side effects, and mental comorbidities) as well as social disadvantages (like divorce, unemployment, social stigma, and sickness interfering with social life) and familial circumstances are among these determinants (such as family caregiver characteristics and social support). Unrelated to the result of seizures, side effects of antiepileptic medications have become one of the best indicators of lowered health-related quality of life.

REFERENCES

1. Zeng K, Wang X, Xi Y. Adverse effects of carbamazepine, phenytoin, valproate and lamotrigine monotherapy in epileptic adult Chinese patients. *Clin Neurol Neurosurg.* 2010;112 (4):291-295.
2. Carpay T, Aldenkamp G, van Donselaar CA. Complaints associated with the use of antiepileptic drugs: results from a community-based study. *Seizure.* 2005;14:198-206.
3. Dogan EA, Usta BE, Bilgen R, Senol Y. Efficacy, tolerability, and side effects of oxcarbazepine monotherapy: a prospective study in adult and elderly patients with newly diagnosed partial epilepsy. *Epilepsy Behav.* 2008;13:156-161.
4. Newton HB, Dalton J, Goldlust S, Pearl D. Retrospective analysis of the efficacy and tolerability of levetiracetam in patients with metastatic brain tumors. *J Neurooncol.* 2007;84:293-296.
5. Perucca E, Meador KJ. Adverse effects of antiepileptic drugs. *Acta Neurol Scand Suppl.* 2005; 181:30-35.