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## Epilepsy Induced Anxiety Disorder in A Tertiary Care Hospital – A Case Study

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### ABSTRACT

A 20-years-old male patient was admitted in government hospital with chief complaints of 6 episodes of seizure with the time interval of 1 hour, fever for one day, vomiting for one day (1 episode). The patient complaints in psychiatric interview; that he lacks concentration, isolation himself from family and avoiding to go out as he was getting sudden seizure episode. He belongs to low socio economic status, so he thinks that his health issue would cause financial difficulties. The patient was given a specialized questionnaire named HADS (Hospital Anxiety and Depression scale) to analyse the severity of anxiety disorder. The patient scored 15 on 21 which represents that the patient has abnormal case of anxiety. He also suffered from anxiety and depressive symptoms like sleeplessness, irritability, lack of interest, hopelessness for past 6 months. The diagnostic and psychiatric interview indicated that the patient was suffering from generalized tonic-clonic seizure with anxiety. The patient has advised to overcome from her anxiety state and cognitive behavioural therapy was suggested. As Clinical pharmacist, patient counselling had given regarding diseased condition, medications and lifestyle modification to control the problem and to improve the patient's quality of life.

**Keywords:** Seizure, Anxiety, Counselling, HADS, Clinical Pharmacist, Quality of life.

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## INTRODUCTION

Epilepsy is one of the most common neurological disorders in developing countries like India. Generalized epilepsy is also known as primary generalized epilepsy or idiopathic epilepsy and it is a form of epilepsy characterized by recurrent unprovoked seizure with no apparent cause. The etiological cause of generalized epilepsy may be due to genetics, head trauma, changes in the brain structure, and an infection of the brain like meningitis or encephalitis and congenital condition. The signs and symptoms of generalized epilepsy are stiff muscles, rhythmic muscle contraction, mental confusion or confusion following seizure, leaking of urine and lips and tongue biting. First line therapy for epileptic patients can be prescribed with the first line drugs such as Carbamazepine, Phenytoin, Clobazam, Lamotrigine, Levetiracetam, Oxcarbazepine, Phenobarbitone, Valproate, etc..<sup>(1)</sup>.

Many studies have been shown that anxiety is the most common psychological condition of epilepsy. There are certain important correlates are lies between epilepsy and anxiety such as clinical factors, psychological factors and environmental factors. Anxiety is a group of psychiatric disorders characterized by significant feelings of anxiety and fear. Anxiety is a worry about future events and fear is a reaction to current events<sup>(2)</sup>. The etiological cause of anxiety may be due to an exposure to stressful situation like fear and danger, withdrawal symptoms and electrolyte imbalance. These feelings may cause physical symptoms, such as a fast heart rate and shakiness. Anxiety includes pervasive feelings of tension, experiencing fear, dread, apprehension, and impending disaster, as well as unpleasant feelings of stress and cognitive symptoms like confusion, lack of alert mechanism and concentration, losing control fear<sup>(3)</sup>. Cognitive impairment and neuropsychiatric conditions are among the most commonly encountered epilepsy comorbidities. These comorbidities affect the patient's quality of life, psychosocial and treatment outcomes. Anxiety disorders among epilepsy patients were common and many studies were revealed<sup>(4)</sup>.

Treatments come in many forms named poly therapies, ranging from therapies such as pharmacotherapy and psychotherapy such as cognitive behavioural therapy (CBT), herbal therapies, meditation and motivational therapy.

### **CASE PRESENTATION:**

This case study was carried out in psychiatric ward in the department of inpatient in Tertiary Care Hospital present in Thiruvallur. A 20-years-old male patient was admitted in the hospital with 6

episodes of seizure with the time interval of 1 hour, fever for one day, vomiting for one day (1 episode).

On examination the patient was found to be febrile, conscious and oriented at the time of admission. Physical examination reveals that the patient was found to have raise in body temperature with pulse rate 80 beats/min, respiratory cycle 20/min, blood pressure 120/80mmHg. The laboratorial reports reveals that the patient was found to have increased white blood cells and slightly decreased lymphocytes. The CT scan report shows that the patient has no significant abnormalities in the brain.

The patient was given a specialized questionnaire named HADS (Hospital Anxiety and Depression scale) to analyse the severity of anxiety disorder. The patient scored 12 on 21 which represents that the patient has abnormal case of anxiety. The patient had past medical history of epilepsy in his childhood. He is non-alcoholic and non-smoker. He takes mixed diet and he has normal bowel and bladder habits. He was insomniac. He also suffered from anxiety and depressive symptoms like sleeplessness, irritability, lack of interest, hopelessness for past 6 months.

#### **Personal sketch of a patient:**

The patient complaints in psychiatric interview; that he lacks concentration. He makes himself isolated from his friends and family. He started avoiding to go out as he was getting sudden seizure episode. He was in a general state of anxiety about anything. He thinks that he was having a serious health issues which was going to ruin his life. Thus, he was not able to enjoy himself and was always feeling sad. The patient has the hobby of going long drive and hanging out with friends. He started losing interest in it. He belongs to low socio economic status, so he thinks that his health issue would cause financial difficulties. As far as his psychological complaints are concerned, it appeared that the patient has suffered from Insomnia, loss of appetite, hopelessness and Lethargy.

The result of all the above symptoms shows that the patient was suffering from anxiety disorder caused by generalized tonic clonic seizure. The diagnostic and psychiatric interview indicated that the patient was suffering from generalized tonic-clonic seizure with anxiety. The patient was treated with phenytoin injection 100mg with the frequency of 3 times a day to treat seizure, Paracetamol tablet 500mg thrice a day to reduce fever, omeprazole 20mg twice a day to treat gastric effects, Midazolam injection 1mg was administered intravenously once a day to treat anxiety. Cognitive behavioural therapy was given to the patient to overcome anxiety. It involves the collaboration of patient with the therapist to develop skills for testing and modifying beliefs,

identifying distorted thinking, and changing behaviours. It helps to overcome anxiety caused by seizure. The patient was monitored regularly to improve his health condition.

## DISCUSSION:

The patient was counselled accordingly regarding disease, drugs and lifestyle modifications to improve patient's quality of life. Some of the counselling points which could make better improvement in patient's condition are:

- Patients can slowly recover them by take care of self-help treatment.
- Cognitive behavioural therapy is one type of effective psychotherapy. By focusing on the relationship between thoughts, feelings and behaviour, it can help patients recognize signs of anxiety and gradually face their anxieties. Other forms of psychotherapy include family therapy, behavioural therapy and mindfulness- and acceptance-based therapies
- Encouraging the patient to keep themselves relaxed by practicing breathing exercise, aromatherapy, massages.
- Regular exercise has a variety of benefits for both their physical and mental health. Yoga can also be habituated.
- Motivating them to concentrate on their hobbies or activities that give them pleasure. Patients are encouraged to read inspirational stories to motivate themselves.
- Reduce your stress levels. Extreme stress, however, may trigger seizures. Stress busters are advisable.
- Patients are advised to follow or develop a sleep routine. Because, lack of sleep increases the risk of seizure occurrences.
- Patients having too much caffeine intake are known to disrupt sleep and speed up their heart rate. Both of these can have adverse effects on anxiety levels of a patient. Instead of caffeine, herbal drinks like green tea can be substituted or advisable.
- The patient was to quit the consumption of alcohol or smoking. Because, alcohol and smoking have been known to make symptoms of anxiety worse.
- Patients are advised to speak to someone they trust to get some sense of relief.
- Positive feedback and support can help motivate to a person to stay the course of treatment. Advising the patient to keep his environment surrounded by the positive people or people who will motivate him.

- Patients are advised to check with their physician before taking any additional medications such as OTC medications. OTC medications can aggravates the level of anxiety hence the patient should be advised to consult doctor before taking OTC medication.
- Ideally, the family should be supportive to the affected patient for his or her recovery.
- Patients are advised to discuss the physician before performing certain activities like swimming, driving, etc.. to avoid the future consequences.
- As anti-epileptic medications have been proved that decrease bone density in many literatures. Hence, the patient with epilepsy has the greater risk for bone deformities such as osteoporosis, osteopenia, and fractures. Vitamin D, which is extremely important for bone strength.
- Patient with epilepsy may have disturbances in levels of calcium, magnesium, and sodium which can be caused by antiepileptic drugs (AEDs). So patient is advised to schedule regular bone density tests, mineral and vitamin levels regularly.
- In rare cases, some people with epilepsy are photosensitive. Flickering television images, video games, mobile phones and flashing lights can trigger seizures.
- Compliance the current prescription & Patient was advised to maintain their regular hospital check-ups.
- Do not stop or change the dose of the medicine without consultation of doctor, review advice.
- Advising the patient to not to skip any of the doses and to follow regular medical follow ups and counselling session.
- Take the missed dose as soon as you remember. Skip the missed dose if it is almost time for your next scheduled dose. Do not take extra medicine to make up the missed dose.
- Overdose may include extreme drowsiness, loss of balance or coordination, limp or weak muscles, or fainting.
- Emphasize importance of following examinations to monitor progress of therapy <sup>(5-7)</sup>.

## CONCLUSION:

This case study presented the anxiety disorders due to epilepsy and the patient has advised to overcome from her anxiety state and cognitive behavioural therapy was suggested. As Clinical pharmacist, patient counselling had given regarding diseased condition, medications and lifestyle modification to control the problem and to improve the patient's quality of life.

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