An Unusual Case of Status Epilepticus

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ABSTRACT

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Status epilepticus is a common neurological emergency. We report a fifty year old male who presented in status epilepticus with twenty five episodes per day which lasted for four days. This was controlled by using two hundred mg of zolpidem per day, which was subsequently slowly weaned off.

Keywords: Status epilepticus, Zolpidem, Withdrawal

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INTRODUCTION

A fifty year old male politician, with hypertension, diabetes mellitus, coronary artery disease and chronic alcoholic liver disease, was admitted with a history of altered sensorium of twenty four hours duration. On admission he was stuporous with episodes of hyperventilation, dystonic posturing and violent behavior; which was recurrent with no return to normal sensorium in between. He also experienced overt tonic clonic convulsions repeatedly. All investigations for infections and metabolic causes turned out to be negative but ictal EEG showed surprisingly beta coma. The relatives then revealed that he was in the habit of taking one thousand and five hundred mg of zolpidem daily in addition to alcohol. He was started on zolpidem two hundred mg daily and the patient returned to normal within six hours, thus indicating that this was a rare case of zolpidem dependence withdrawal seizure and life saved with zolpidem only.

CASE REPORT

A fifty year old male politician presented to the medical casualty with history of repeated seizures.

He was suffering from diabetes mellitus, hypertension, coronary artery disease and alcoholic liver disease. He was de-addicted six years ago. He had been using one thousand and five hundred milligrams of zolpidem daily, costing nine hundred rupees per day. He was without the drug for nearly twenty-four hours and became unconscious with repeated seizures.

General examination revealed well built individual. He was comatose with large pupils reacting to light. Optic fundi were normal. There were no signs of meningeal irritation. All four limbs were flaccid, hyporeflexic with normal plantars. Blood pressure was 170/100 mm of mercury.

In the hospital he developed repeated generalized seizures (more than twenty five times per day) for the next four days. In between he was showing violent behaviour and dystonic posturing of upper and lower limbs. He also had mild hepatomegaly, spider naevi and gynecomastia.

His laboratory parameters showed – Hemoglobin-17.1, Total count-15710, Polymorphs-90, Lymphocyte-10, ESR-8,Platelet-1.61 lacs, INR-1.15,Blood sugar-224 and normal renal, electrolytes and liver function tests. Ultrasound abdomen was suggestive of chronic liver disease. Chest Xray, CT Brain was normal. EEG showed diffuse beta activity.

He was treated with insulin, nasogastric feeds,, fosphenytoin 15 mg/kg loading followed by 100 mg every fourth hourly, Injection lorazepam 8 mg and injection Levetiracetam as per recommendation. The seizures could not be controlled with any of these measures. Pentothal and mechanical ventilation was considered, but the relatives were not consenting for this option. Oral replacement zolpidem was attempted at a dose of 200 mg in three divided doses and patient became completely seizure free in six hours. There was no significant post ictal confusion. He was transferred to the psychiatrist for de-addiction. The drug was slowly

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reduced to thirty mg a day and was discharged with advice to come for follow up. However he restarted taking the drug in very high dose again and was not motivated for drug withdrawal.

DISCUSSION

Status epilepticus is well known with anticonvulsant withdrawal state. However only rare reports are available following zolpidem withdrawal.[1] In the literature maximum drug dose abused is two hundred to six hundred mg per day.[2,3,4] Withdrawal seizures have occurred but prolonged status has not been reported.

This patient had gradually increased the dose of zolpidem prescribed for alcoholic de-addiction, upto one thousand five hundred milligram per day. He was off the drug for twenty four hours. All other causes of seizures were excluded. Interestingly ictal EEG showed only beta probably suggesting that ictal activity was chemical only. More over post status cognitive decline or confusion is also surprisingly not seen in this case.

Zolpidem is a non benzodiazepine which acts through binding to benzodiazepine receptors. A hypnotic acting selectively at GABA A omega 1 receptor. Sudden loss of excessive chemical inhibition might be tilting the neurochemical balance resulting in seizures without causing any structural change which can explain the lack of ictal EEG changes and cognitive decline. Six cases of zolpidem withdrawal seizures are reported in literature. Normal ictal EEG and lack of post ictal cognitive decline have not been reported in literature.

CONCLUSION

Zolpidem withdrawal seizures are not common. Our case is probably the first with prolonged status epilepticus. Dose used is one thousand and five hundred mg per day. The ictal EEG was normal and post ictal cognitive decline and confusion was absent. The patient responded only to reintroduction of zolpidem. This case is being reported for the above unique features.

END NOTE

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