Dear Editor,

Barbexaclone (Maliasin®) is an antiepileptic drug which is composed of phenobarbital and salt compound of propylhexedrine which is known to be a central nervous system stimulant. It has been reported that psychotic symptoms may rarely develop during treatment with phenobarbital and other antiepileptic drugs (1). Although there are case reports in the literature about development of addiction with barbexaclone (2), there is no information about development of psychotic disorder with discontinuance after long-term use. In our article, we aimed to present a patient who developed psychotic symptoms and some behavioral changes with sudden discontinuance of barbexaclone.

M.K 38-year-old, married, has three children, primary school graduate male patient. He presented to the emergency department with complaints including nervousness, peculiar speech and behavior, tendency to harm himself and his relatives, sensibility and suspiciousness. According to the information obtained from his family, the patient had these complaints for the last three days. He tried to burn his house a few hours ago, broke the glasses of the cars in the district and was brought to our clinic by the police, since he did not accept treatment. He had no communication with his environment for approximately 20 years. He used barbexaclone 100 mg/day and carbamazepine 800 mg/day for treatment of complex partial seizures accompanied by meaningless walking and mouth-tongue automatisms some of which became generalized. He had approximately 3-4 seizures a year. It was learned that the patient who had these complaints for the last three days discontinued barbexaclone two days before the onset of the symptoms. Epileptic seizure was not described in the initial period of the complaints. The patient who had no previous history of psychiatric disease had no physical illness except for epilepsy. Complete blood count, biochemical tests and thyroid function tests were within normal limits. On neurological examination, his consciousness was open, he had full orientation to place, time and person. However, full cooperation could not be established with the patient because of active psychotic symptoms. The patient had disarthric speech. On psychiatric examination, it was observed that he had intermittent agitations, paranoid thoughts and delusions of persecution. The diagnosis of delirium was excluded, since orientation to place, time and person in the patient was complete on examination of orientation performed during the periods when delusions and hallucinations were present. No pathological finding was found on brain magnetic resonance imaging and electroencephalography (EEG). Personality test could not be performed, since the patient was not cooperated. Amisulpride 200 mg/day was started considering “Psychotic disorder related to use of psychoactive substance” (progressing with delusions-starting at the time of discontinuance) according to the American Psychiatry Association, Mental Disorders Diagnostic and Statistical Manual IV-TR (3) because of the fact that there was no secondary factor explaining the condition.
except for the drug he used and the information obtained from his history. Carbamazepine 800 mg/day which he used as antiepileptic treatment was continued. Diazepam 15 mg/day was added considering the risk of epileptic seizure and phenobarbital withdrawal symptoms. Withdrawal symptoms were not observed during the follow-up period of approximately 1 month. Laboratory tests were within normal limits. During the following follow-up period of 6 months, no precursor, residual or psychotic symptom was observed.

Although psychosis picture is frequently observed in the course of epilepsy, the fact that no epileptic seizure was described before the psychotic attack, epileptiform activity was not observed on EEG recordings, the patient had no previous history of psychotic attack and responded to antipsychotic treatment better and experienced the attack following sudden discontinuation of barbexaclone suggested that the psychotic picture might be related with sudden discontinuation of the drug rather than psychosis which may be observed during the course of epilepsy.

Neuropsychiatric symptoms may be observed in relation with antiepileptic drugs. Although barbexaclone is a drug which is as efficient as phenobarbital and tolerated better, it carries a risk of addiction in terms of propylhexedrine which is the other component of the drug and its abuse is observed because of its amphetamine-like stimulant effect and structural similarity (4). In the literature, sudden death (5), soft tissue damage (6) and brain stem involvement characterized with diplopia (7) have been reported with propylhexedrine. In addition, cases of addiction have been described with use of barbexaclone. Darcın et al. (4) reported use of barbexaclone with the aim of relaxation in a patient who was an old cocaine user. Sezgin et al. (2) presented two patients who were diagnosed with barbexaclone abuse for the aim of calming down and relaxation and barbexaclone addiction. Unlike these negative effects, Yaris et al. (8) reported that no teratogenic effect was observed in the infant of a mother who used barbexaclone during pregnancy unwittingly.

It has been recognized that individuals who have a personal or familial history of substance abuse have a tendency to abuse especially drugs which are effective on the central nervous system. It is thought that the property of barbexaclone which leads to off label use of the drug arises from its sedative or anxiolytic effect (2). It has been reported that the reason that antiepileptic addiction does not develop in epileptic patients is the fact that the expectations related with the drug are related with the anticonvulsant effect rather than the psychotropic effect (9).

Conclusively, considering the fact that sudden discontinuation of barbexaclone which is known to have an addiction potential (10) may be related with psychotic process and the physician’s attention in terms of psychotic disorder or similar psychiatric side effects while using antiepileptic drugs will be beneficial in the diagnosis and treatment.

References