**p-Chloro-Phenyl-Selenosteroid Attenuates Pentylenetetrazole-Induced Seizures In Mice**

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Introduction: Epilepsy is a neurological disorder characterized by behavioral and electroencephalographic (EEG) changes in a group of neurons in the central nervous system (CNS). Numerous studies have suggested that a cascade of biological events, including understimulation of the GABAergic system and oxidative stress underlies the development and propagation of epilepsy. In this view some organoselenium compounds were tested with promisor results in some seizure models. Thus the present study investigated the anticonvulsive effect of p-chloro-phenyl-selenosteroid (SE) on a chemical model of seizures induced by pentylenetetrazole (PTZ) in mice. Material and Methods: Female Swiss albino mice received SE at the doses of 10 mg/kg and 20 mg/kg by oral route, 30 min before the administration of PTZ (60 mg/kg, intraperitoneal route (i.p)). PTZ group received canola oil 30 min before administration of PTZ (60 mg/kg, i.p). The animals were placed into an individual plastic cage for observation lasting 60 min. The onset of generalized seizures (tonic-clonic) was used as the endpoint. Results and Discussion: SE at the dose of 10mg/kg significantly prolonged the latency of the onset of the first convulsive episode but did not reduce the number of animals that presented seizures. PCSE at the dose of 20mg/kg significantly prolonged the latency of the onset of the first convulsive episode and reduced the number of animals that presented seizures. Conclusions: The present study demonstrates that PCSE exerts anticonvulsant action against PTZ-induced seizures and more studies need be made for know the precise mechanism involved.

Keyword: Seizures, GABA, pentylenetetrazole, p-chloro-phenyl-selenosteroid. 
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