

Ethosuximide (Zarontin)

Ethosuximide, also known by its trade name Zarontin, is a first line anticonvulsant drug used in the treatment of absence seizures, also known as petit mal seizures. It works by suppressing neurons in the thalamus responsible for generating absence seizures. More specifically, it does so by blocking thalamic T-type calcium channels. Possible side effects include Steven-Johnson syndrome, fatigue, diarrhea, and blood dyscrasias. This medication should not be discontinued abruptly.



PLAY PICMONIC

Indications

First Line Absence Seizure

First-place Absent-mind Caesar

Ethosuxamide is used as a first line agent to treat absence seizures (petit mal seizures), and is preferred over other agents because this drug does not cause hepatotoxicity.

Mechanism of Action

Blocks Thalamic T-Type Ca2+ Channels

Block-guy blocking Thor-T on Calcium-cow at Channel

This medication binds and blocks thalamic T-type Ca^{2+} channels. T-type channels serve pacemaking functions in both central neurons and support calcium signaling, and are also involved in the modulation of firing patterns of neurons.

Side Effects

Stevens-Johnson Syndrome

Steve-Johns

Ethosuxamide can trigger Stevens-Johnson syndrome. Stevens-Johnson syndrome is a life threatening skin condition, which is a hypersensitivity complex affecting the skin and mucous membranes.

Fatigue

Sleepy-guy

Patients taking ethosuximide can complain of fatigue, as this is a common side effect.

Diarrhea

Toilet

Patients taking this drug often have the side effect of diarrhea and GI upset.



Blood Dyscrasias

Blood-cell Disc-razor

Although rare, patients taking ethosuximide may develop blood dyscrasias. Examples include leukopenia, agranulocytosis, and aplastic anemia.

Considerations

Do Not Stop Abruptly

Can't Stop Cold-turkey

This medication should not be discontinued abruptly. Dosage should be reduced gradually when withdrawing ethosuximide.