

Phenobarbital (Barbiturates)

Phenobarbital is a barbiturate medication indicated for use in patients with seizure disorders. This medication is a barbiturate, acting on GABA receptors to inhibit excitatory neuronal firing. Thus, this drug can lead to CNS depression with side effects, such as drowsiness, fatigue, and ataxia. Paradoxical excitement can also develop. Due to the potential for overdose, plasma levels of the drug should be checked, and healthcare providers should realize that there is a high potential for recreational abuse with phenobarbital.



PLAY PICMONIC

Mechanism

Barbiturate

Barbara-doll

Phenobarbital is a long-acting barbiturate medication. These drugs work at GABA receptors in the central nervous system, helping to inhibit neuronal excitation.

Indications

Seizures

Caesar

This medication is indicated for treating seizures, such as partial and generalized tonic-clonic seizures. Because this drug decreases CNS excitation, it can be used for daytime sedation, along with induction of sleep and anesthesia.

Side Effects

Ataxia

A-taxi

Ataxia is another side effect experienced in patients taking phenobarbital. This is typically seen in patients taking higher doses, or in those with overdose, where they will additionally show nystagmus.

Paradoxical Excitement

Parrot-ox Excited

Though the mechanism for why this occurs is not understood, it is known that patients (especially children) can develop hyperactivity or "paradoxical excitement." Thus, it is important to ensure a calm environment after administration of phenobarbital.

Fatigue/Drowsiness

Sleepy-guy

A side effect to phenobarbital use is drowsiness. This is not a common complaint, however, as most barbiturates are used to help patients go to sleep. Furthermore, patients build tolerance to the drug overtime, overcoming this drowsiness.

Considerations

Monitor Plasma Levels

Monitor and Plasma-TV

Patients should have their plasma levels of phenobarbital measured when first given, as there is a high risk for overdose. The ideal plasma level is between 15 to 40 mcg/mL, as doses above 1 gram can be fatal. IV administration should be done slowly to prevent CNS depression; monitor closely for infiltration or extravasation, as the medication is highly alkaline and can cause local tissue injury.

High Potential for Abuse

[Phantom-barbara-doll Abused](#)

There is high potential for recreational abuse of phenobarbital, as patients can develop feelings of relaxed contentment and euphoria. This is risky, as high doses can induce sleep and possible CNS depression, and it is cautioned that the drug should be obtained from prescribers.