

Phenobarbital

Class: Anticonvulsant, Barbiturate; Barbiturate

Indications: Management of generalized tonic-clonic (grand mal), status epilepticus, and partial seizures; sedative/hypnotic

Note: Use to treat insomnia is not recommended (Schutte-Rodin, 2008)

Unlabeled: Prevention and treatment of neonatal hyperbilirubinemia and lowering of bilirubin in chronic cholestasis; neonatal seizures

Available dosage form in the hospital: Tablet, Oral: 15 mg, 30 mg, 60 mg, 100 mg.

Solution, Oral: 200 mg/mL

Solution, Injection, as sodium: 30 mg/mL, 40 mg/mL.

Dosage:

-Sedation: Oral, I.M.: 30-120 mg/day in 2-3 divided doses

-Preoperative sedation: I.M.: 100-200 mg 1-1.5 hours before procedure

-Anticonvulsant/status epilepticus:

-Loading dose: I.V.: 10-20 mg/kg (maximum rate ≤ 60 mg/minute in patients ≥ 60 kg); may repeat dose in 20-minute intervals as needed (maximum total dose: 30 mg/kg)

-Maintenance dose: Oral, I.V.: 1-3 mg/kg/day in divided doses or 50-100 mg 2-3 times/day

-Sedative/hypnotic withdrawal (unlabeled use): Initial daily requirement is determined by substituting phenobarbital 30 mg for every 100 mg pentobarbital used during tolerance testing; then daily requirement is decreased by 10% of initial dose.

Geriatric

Geriatric patients should be started at the lowest recommended dose. Refer to adult dosing.

Renal Impairment:

$Cl_{cr} < 10$ mL/minute: Administer every 12-16 hours.

Moderately dialyzable (20% to 50%)

Hepatic Impairment:

Reduce dose in patients with hepatic impairment

Common side effects: Cardiovascular: Bradycardia, hypotension, syncope

Central nervous system: Agitation, anxiety, ataxia, CNS excitation or depression, confusion, dizziness, drowsiness, hallucinations, “hangover” effect, headache, hyperkinesia, impaired judgment, insomnia, lethargy, nervousness, nightmares, somnolence

Dermatologic: Exfoliative dermatitis, rash, Stevens-Johnson syndrome

Gastrointestinal: Nausea, vomiting, constipation

Hematologic: Agranulocytosis, thrombocytopenia, megaloblastic anemia

Local: Pain at injection site, thrombophlebitis with I.V. use

Renal: Oliguria

Respiratory: Laryngospasm, respiratory depression, apnea (especially with rapid I.V. use), hypoventilation

Miscellaneous: Gangrene with inadvertent intra-arterial injection

Pregnancy Risk Factor: B/D (manufacturer dependent)