

PHENOBARBITAL (Phenobarbitone)

ACTIONS AND USES

Phenobarbital is an antiepileptic agent used in the management of seizures.

DOSAGE

Loading dose is 20mg/kg by IV infusion.

A second loading dose after 30 minutes of 20mg/kg may be given but only if clinically indicated for refractory seizures and has been discussed with consultant.

Maintenance dose is 5mg/kg IV or orally every 24 hours starting 12 hours after loading dose.

THERAPEUTIC DRUG MONITORING

Frequency of drug level: Check trough blood levels every 7-14 days. Take sample immediately prior to next dose.

Volume of blood sample: Send 100 µl of blood to LUHD biochemistry laboratory at RIE

Site of sample: The sample must NOT be taken from the administration site.

Therapeutic Trough Level: 15-40mg/L.

ADMINISTRATION

The loading dose should be given by short infusion of 30 minutes and the maintenance dose by slow IV bolus over 5 minutes. **Maximum rate is 1mg/kg/minute** i.e. a dose of 5mg/kg must be given over 5 minutes

RECONSTITUTION

Phenobarbital for injection is available in a solution containing 60mg/ml per ampoule, reconstitution is not necessary but it **must be diluted** at least 1 in 10 as it is hyperosmolar see below.

Higher concentration can be damaging to veins and **MUST** be used only after discussion with consultant in charge.

NB Strengths other than 60mg/ml are also available **check strength**.

Phenobarbital injection 5mg/ml

Add 1ml of Phenobarbital injection 60mg/ml to 11ml Water for Injection and shake well to mix.

Oral preparation of phenobarbital can be ordered from pharmacy.

Other compatible diluent

Sodium Chloride 0.9%.

Incompatibilities

Do not infuse with TPN, cimetidine, morphine, midazolam and vancomycin and hydrocortisone.

STORAGE

Discard opened ampoules and diluted preparations immediately after use. Protect unopened ampoules from light. Oral solution may be ordered from pharmacy if required. Store IV and oral preparation at room temperature.

MONITORING

Monitor respiratory rate blood pressure, heart rate and for sedation. Phenobarbital can decrease the levels of chloramphenicol, metronidazole, corticosteroids (dexamethasone) and rifampicin. Monitor levels. Observe site for extravasation and phlebitis.