

AMINOPHYLLINE

INJECTION BP 250 MG / 10ML

Slow I.V / I.V. infusion

Composition:

Each ampoule contains 10 ml
Aminophylline BP 240 mg
Qs Water for Injections BP
Dosage form
Sterile injection

Indications

Diseases of the cardiovascular system (for example, an adjunct in the treatment of pulmonary edema or paroxysmal nocturnal dyspnoea caused by left ventricular heart failure), reversible airway obstruction, including asthmatic status and acute bronchospasm.

Mechanism of action

Aminophylline is a soluble compound of theophylline with ethylenediamine. Theophylline's main action is a direct relaxation of the smooth muscles in the airways of the bronchi and pulmonary blood vessels, thus acting as a bronchodilator.

Dosage

Aminophylline BP injection can be administered by intravenous injection or slow intravenous infusion of glucose injection or sodium chloride injection. It has also been administered by deep intramuscular injection in a dose of 500 mg in 2 ml of water for injections, but such injections are painful.

Contraindications

Aminophylline injection should not be used in patients with hypersensitivity to ethylenediamine or those allergic to theophylline, caffeine or theobromine.

Aminophylline should not be administered concurrently with other xanthine drugs. When therapeutic doses of aminophylline and / or theophylline are administered simultaneously by more than one route or in more than one preparation, the risk of severe toxicity is increased.

The use of IV aminophylline is generally not recommended in children under 6 months of age.

The use of aminophylline is contraindicated in patients with acute porphyria.

Special precautions

Intravenous aminophylline should be administered very slowly to avoid dangerous central nervous system and cardiovascular side effects due to the direct stimulating effect on aminophylline.

Aminophylline injection should be administered with caution to children and patients over 55 years of age.

Caution is also advised in patients who have been immunized against influenza or who have active influenza infection or acute febrile illness.

Aminophylline should be administered with caution in patients with heart failure, chronic obstructive pulmonary disease, kidney or liver dysfunction and in chronic alcoholism since aminophylline clearance is decreased.

Theophylline clearance can be increased in smokers and in people regularly exposed to tobacco smoke.

During serum treatment regular potassium levels should be monitored. This is essential during combination therapy with beta2-agonists, corticosteroids or diuretics, or in the presence of hypoxia.

Aminophylline should be used with caution in patients with peptic ulcer, hyperthyroidism, glaucoma, diabetes mellitus, severe hypoxemia, hypertension, impaired heart or circulatory function and epilepsy, as these conditions can be exacerbated.

Pregnancy and lactation

Use during pregnancy

Safe use in pregnancy has not been established. Since xanthines can cross the placental barrier, possibly resulting in potentially dangerous levels of serum xanthine in the newborn, risk-benefit must be considered when this drug is used in pregnancy. The pharmacokinetics of aminophylline can be changed during pregnancy and therefore serum concentrations of theophylline may need to be measured more frequently in patients undergoing aminophylline therapy during pregnancy.

Use during lactation

Since theophylline is excreted in breast milk (in concentrations of approximately equivalent to maternal serum concentrations: a child ingesting one liter of breast milk containing 10 - 20 mcg / mL theophylline per day is likely to receive 10 - 20 mg of theophylline per day.), and breastfed babies may experience irritability and other side effects, the use of theophylline is not recommended in breastfeeding mothers.

Side effects

Adverse events are usually as a result of gastrointestinal irritation, stimulation of the central nervous system and effects on the cardiovascular system. Hypotension, arrhythmias and seizures can follow intravenous injection, particularly if the injection is very fast, and sudden deaths have been reported. Severe toxicity can occur with unprecedented milder symptoms

Immune system: hypersensitivity reactions

Nervous / psychiatric system: Headache, insomnia, confusion, restlessness, hyperventilation, anxiety, vertigo / dizziness, tremor. Higher doses can lead to manic behavior, delirium and seizures.

Eye disorders: visual disturbances.

Heart diseases: palpitations, tachycardia, cardiac arrhythmias, hypotension.

Gastrointestinal: Nausea, vomiting, abdominal pain, diarrhea, gastro-oesophageal reflux, gastrointestinal bleeding.

Skin and subcutaneous tissues: skin rash, maculopapular rash, erythema, pruritus, urticaria, exfoliative dermatitis. Site reactions General / Administration: Intramuscular injections are painful, the pain lasting several hours. Higher doses can result in hyperthermia and excessive thirst.

Overdose

Aminophylline has a low therapeutic index. Theophylline toxicity is more likely to occur when serum concentrations exceed 20 micrograms / ml and becomes progressively more severe at higher serum concentrations.

Adult deaths occurred during IV administration of high-dose Aminophylline in patients with renal, hepatic or cardiovascular complications or where the injection was given quickly.

The following signs and symptoms may be present in aminophylline overdose:

Cardiovascular: tachycardia, arrhythmias, palpitations, hypotension.

Central nervous system: agitation, confusion or altered behavior including toxic psychosis, seizures.

Gastrointestinal: nausea, vomiting, diarrhea and / or hematemesis, continuing or severe abdominal pain, acute pancreatitis.

Genitourinary: renal failure.

Metabolic: hyperglycemia, hypokalemia, metabolic acidosis, hypophosphatemia, hypercalcemia.

Respiratory: tachypnea, respiratory arrest, respiratory alkalosis.

Others: excessive thirst, slight fever, tinnitus.

Treatment

There is no specific antidote for aminophylline overdose. Treatment of overdose is symptomatic and supportive.

Administration of sympathomimetic drugs should be avoided.

Storage condition: Store below 25 ° C, protected from light.

Keep out of the reach of children.

It should not be used, if separate crystal.

Presentation: 10 ml clear glass ampoule

Manufactured in India:

