

Description

A trisubstituted xanthine derivative designated chemically as 1-(5-oxohexyl)-3, 7-dimethylxanthine, IUPAC name: 3,7-dimethyl-1-(5-oxohexyl)-3,7-dihydro-1H-purine-2,6-dione. Pentoxifylline is soluble in water and ethanol, and sparingly soluble in toluene.

It is thought that Pentoxifylline and its metabolites improve the flow properties of blood by decreasing its viscosity. In patients with chronic peripheral arterial disease, this increase blood flow to the affected microcirculation and enhance tissue oxygenation. Some of the mechanisms by which this is thought to occur include dose related haemorrhological effects, such as decreased blood viscosity, improved erythrocyte flexibility, decreased plasma fibrinogen and enhanced platelet deaggregation. However, the precise mode of action of Pentoxifylline and the sequence of events leading to clinical improvement are still to be clearly defined.

After oral administration in aqueous solution Pentoxifylline is almost completely absorbed. It undergoes a first-pass effect and the various metabolites appear in plasma very soon after dosing. Peak plasma levels of the parent compound and its metabolites are reached within 1 hour. The apparent plasma half-life of Pentoxifylline varies from 0.4 to 0.8 hours and the apparent plasma half-lives of its metabolites vary from 1 to 1.6 hours. There is no evidence of accumulation or enzyme induction (cytochrome P-450) following multiple oral doses.

Indications

In patients with intermittent claudication on the basis of chronic occlusive arterial disease of the limbs, Vasolax[®] can improve function and symptoms. But it is not intended to replace more

definitive therapy, such as vascular surgery, or removal of arterial obstructions when treating peripheral vascular disease.

Dosage and Administration

The usual dosage of Vasolax[®] in controlled-release tablet form is one tablet (400mg) three times a day with or after meals, to be swallowed whole with some liquid. While the effect of Vasolax[®] may be seen within 2 to 4 weeks, it is recommended that treatment be continued for at least 8 weeks. Efficacy has been demonstrated in double blind clinical studies of 6 months' duration.

Digestive and central nervous system side effects are dose related. If patients develop these side effects it is recommended that the dosage be lowered to one tablet twice a day (800mg/day). If side effects persist at this lower dosage, the administration of Vasolax[®] should be discontinued.

In patients with low or labile blood pressure or hepatic dysfunction, an individual dosage adjustment is required. This also applies to patients with renal dysfunction (creatinine clearance of less than 30 mL/min) where, according to individual tolerance, a dosage adjustment of 30 to 50% may be necessary.

Contraindications

Patients who have previously exhibited intolerance to this product or Methylxanthines such as Caffeine, Theophylline, and Theobromine. Vasolax[®] should not be given to patients with recent or severe hemorrhage, e.g. massive retinal hemorrhage, cerebral hemorrhage, acute myocardial infarction or patients with peptic ulcer or a recent history thereof.

Precautions

Since Pentoxifylline is extensively metabolized in the liver and eliminated through the kidneys,

the use of this drug is not recommended in patients with marked impairment of kidney or liver function. Patients with less severe impairment of these organs should be closely monitored during Vasolax[®] therapy and may require lower doses.

Patients with chronic occlusive arterial disease of the limbs frequently show other manifestations of arteriosclerotic disease. Vasolax[®] has been used safely for treatment of peripheral arterial disease in-patients with concurrent coronary artery and cerebrovascular diseases, but there have been occasional reports of angina, hypotension, and arrhythmia. Controlled trials do not show that Vasolax[®] causes such adverse effects more often than placebo, but, as it is a methylxanthine derivative, it is possible that some individuals will experience such responses. Careful monitoring is required in-patients with acute arrhythmias.

Use in pregnancy and lactation

Pregnancy category B1: Since no well-controlled studies in pregnant women have been carried out, Vasolax[®] should not be used in pregnancy unless clearly needed.

Vasolax[®] and its metabolites are excreted in human milk. A decision should therefore be made whether to discontinue nursing or discontinue the drug, taking into account the importance of the drug to the mother.

Adverse effects

The most frequent types of side effects seen with Pentoxifylline were gastrointestinal upsets, including nausea, dyspepsia, vomiting, flatus/bloating, abdominal pain and diarrhea. However, the controlled release preparations of Pentoxifylline resulted in much fewer GI side effects. Side effects related to CNS disturbances include dizziness, headache, and

tremor.

Drug Interactions

Concomitant use with antihypertensive drugs, beta blockers, diuretics and other drugs with blood pressure lowering potential may increase their blood pressure lowering effects.

An increase in the intensity and frequency of adverse events associated with Theophylline may result from concomitant use with Pentoxifylline.

Overdosage

Overdosage with Vasolax[®] has been reported in children and adults. Symptoms appear to be dose related. Flushing, hypotension, convulsions, somnolence, loss of consciousness, fever, and agitation occurred.

In addition to symptomatic treatment special attention must be given to supporting respiration, maintaining systemic blood pressure, and controlling convulsions. Activated charcoal has been used to absorb Pentoxifylline in patients who have overdosed.

Storage

Store in a cool and dry place, away from light. Keep out of reach of children.

Commercial Pack

Vasolax[®] tablet : Box containing 30 tablets in 3 x 10's blister strips. Each CR tablet contains Pentoxifylline BP400 mg.



Manufactured by
BEXIMCO PHARMACEUTICALS LTD.
TONGI, BANGLADESH
© REGISTERED TRADEMARK

BL3992