

Betasec®

Atenolol

Description

Atenolol (**Betasec®**) is a beta-selective adrenergic receptor antagonist which is now widely used in the treatment of hypertension, angina pectoris, cardiac dysrhythmia and myocardial infarction.

Mode of action

Atenolol (**Betasec®**) antagonizes the chronotropic response to stimulation of the cardiac accelerator nerves.

Pharmacokinetics

Absorption of atenolol after an oral dose is rapid and consistent but incomplete. Approximately 50% of an oral dose is absorbed from the gastrointestinal tract, the remainder being excreted unchanged in the feces. Only a small amount (6%-16%) of Atenolol is bound to proteins in the plasma. The elimination half-life of oral Atenolol is approximately 6 to 7 hours. Following oral doses of 50 mg or 100 mg, both beta-blocking and antihypertensive effects persist for at least 24 hours.

Composition

Betasec® 50 mg tablet: Each tablet contains Atenolol BP 50 mg.

Indications

Hypertension, angina pectoris, cardiac arrhythmia, myocardial infarction.

Dosage & administration

The treatment is started with 50 mg tablet and may be increased upto 100mg. The full effect is evident within 1-2 weeks. For angina pectoris, 50-100 mg daily is recommended. For cardiac arrhythmia, 50-100 mg as prophylactic dose is given. For myocardial infarction, starting dose is 50 mg and then 100 mg daily as maintenance dose.

Contraindications

Bronchospasm, heart block, heart failure, cardiogenic shock etc.

Side effects

Cold extremities and fatigue, vivid dreams, insomnia etc.

Use in pregnancy & lactation

Atenolol is safe and effective in pregnancy associated hypertension. Atenolol is excreted in breast milk but is not associated with any adverse effect.

Precautions

The drug should not be given to patients with a history of bronchospasm.

Abrupt withdrawal of Atenolol should be avoided. It may mask the symptoms of hypoglycaemia.

Drug interactions

Disopyramide: Atenolol reduces the clearance of disopyramide by 20%. Additive negative inotropic effects on the heart may be produced. *Ampicillin:* At doses of 1g and above may reduce Atenolol levels. *Oral antidiabetics and insulin:* Beta-blockers may decrease tissue sensitivity to insulin and inhibit and insulin secretion e.g. in response to oral antidiabetics. Atenolol has potential for these actions.

Over dosage

Atenolol is fairly safe when taken in deliberate self-poisoning. Amounts of Atenolol up to 5.6 g have been ingested with uneventful recovery. No specific therapy is required but excessive bradycardia can be treated if necessary with atropine 1-2 mg intravenously or with a β -agonist such as isoprenaline 25 mg initially or ciprenaline 0.5 mg given by slow intravenous injection. Glucagon is effective in reversing the negative inotropic effects.

Storage

Keep out of reach of children. Store in a dry place, below 25°C temperature and protected from light.

Packaging

Betasec® 50 mg Tablet: Each carton contains 10X10 tablets in blister strips.



Manufactured by
Opsonin Pharma Limited
Rupatali, Barishal, Bangladesh.
® Registered Trade Mark.

20-900