150 mm X 150 mm

Indever®

Propranolol Hydrochloride BP

Composition

Indever® 10 tablet: Each tablet contains Propranolol Hydrochloride BP 10 mg.
Indever® 20 tablet: Each tablet contains Propranolol Hydrochloride BP 20 mg.
Indever® 40 tablet: Each tablet contains Propranolol Hydrochloride BP 40 mg.
Indever® SR 40 capsule: Each capsule contains Propranolol Hydrochloride BP 40 mg as sustained release pellets.
Indever® SR 80 capsule: Each capsule contains Propranolol Hydrochloride BP 80 mg as sustained release pellets.

Pharmacology

Indever® is a preparation of Propranolol Hydrochloride. It is a non selective beta-adrenergic receptor blocking agent.

Indication

Indever® tablet is indicated for-

- Hypertension
- Angina pectoris due to coronary atherosclerosis
- Atrial fibrillation
- Myocardial infarction
- Migraine
- Essential tremor
- Hypertrophic subaortic stenosis
- Pheochromocytoma

Indever® SR capsule is indicated for-

- Hypertension
- Angina pectoris due to coronary atherosclerosis
- Migraine
- Hypertrophic subaortic stenosis

Dose and administration

Route of administration: **Indever®** should be taken in oral route.

Dosage of Indever® tablet

General

Because of the variable bioavailability of **Indever®** tablet, the dose should be individualized based on response.

Hypertension

The usual initial dosage is 40 mg **Indever®** twice daily, whether used alone or added to a diuretic. Dosage may be increased gradually until adequate blood pressure control is achieved. The usual maintenance dosage is 120 mg to 240 mg per day. In some instances a dosage of 640 mg a day may be required. The time needed for full antihypertensive response to a given dosage is variable and may range from a few days to several weeks.

Angina pectoris

Total daily doses of 80 mg to 320 mg **Indever®**, when administered orally, twice a day, three times a day or four times a day, have been shown to increase exercise tolerance and to reduce ischemic changes in the ECG. If treatment is to be discontinued, reduce dosage gradually over a period of several weeks.

Atrial fibrillation

The recommended dose is 10 mg to 30 mg **Indever®** three or four times daily before meals and at bedtime.

Myocardial infarction

In the beta-blocker heart attack trial (BHAT), the initial dose was 40 mg three times daily, with titration after 1 month to 60 mg to 80 mg three times as tolerated. The recommended daily dosage is 180 mg to 240 mg **Indever®** per day in divided doses. The effectiveness and safety of daily dosages greater than 240 mg for prevention of cardiac mortality have not been established. However, higher dosages may be needed to effectively treat coexisting diseases such as angina or hypertension.

Migraine

The initial dose is 80 mg **Indever®** daily in divided doses. The usual effective dose range is 160 mg to 240 mg per day. The dosage may be increased gradually to achieve optimum migraine prophylaxis.

Essential tremor

The initial dosage is 40 mg **Indever®** twice daily. Optimum reduction of essential tremor is usually achieved with a dose of 120 mg per day. Occasionally, it may be necessary to administer 240 mg to 320 mg per day.

Hypertrophic subaortic stenosis

The usual dosage is 20 mg to 40 mg **Indever®** three or four times daily before meals and at bedtime.

Pheochromocytoma

The usual dosage is 60 mg **Indever®** daily in divided doses for three days prior to surgery as adjunctive therapy to alpha-adrenergic blockade. For the management of inoperable tumors, the usual dosage is 30 mg daily in divided doses as adjunctive therapy to alpha-adrenergic blockade.

Dosage of Indever® SR capsule

General

Indever® SR capsule provide propranolol hydrochloride in a sustained-release capsule for administration once daily. If patients are switched from **Indever®** tablet to **Indever® SR** capsule, care should be taken to assure that the desired therapeutic effect is maintained. **Indever® SR** capsule should not be considered a simple mg-for-mg substitute for **Indever®** tablet. **Indever® SR** capsule have different kinetics and produces lower blood levels. Retitration may be necessary, especially to maintain effectiveness at the end of the 24-hour dosing interval.

Hypertension

The usual initial dosage is 80 mg **Indever® SR** capsule once daily, whether used alone or added to a diuretic. The dosage may be increased to 120 mg once daily or higher until adequate blood pressure control is achieved. The usual maintenance dosage is 120 to 160 mg once daily. In some instances a dosage of 640 mg may be required. The time needed for full hypertensive response to a given dosage is variable and may range from a few days to several weeks.

Angina pectoris

Starting with 80 mg **Indever® SR** capsule once daily, dosage should be gradually increased at three- to seven-day intervals until optimal response is obtained. Although individual patients may respond at any dosage level, the average optimal dosage appears to be 160 mg once daily. In angina pectoris, the value and safety of dosage exceeding 320 mg per day have not been established. If treatment is to be discontinued, reduce dosage gradually over a period of a few weeks.

Migraine

The initial oral dose is 80 mg **Indever® SR** capsule once daily. The usual effective dose range is 160 to 240 mg once daily. The dosage may be increased gradually to achieve optimal migraine prophylaxis. If a satisfactory response is not obtained within four to six weeks after reaching the maximal dose, **Indever® SR** capsule therapy should be discontinued. It may be advisable to withdraw the drug gradually over a period of several weeks depending on the patient's age, comorbidity, and dose of **Indever® SR** capsule.

Hypertrophic subaortic stenosis

The usual dosage is 80 to 160 mg **Indever® SR** capsule once daily.

Contraindication

Propranolol is contraindicated in patients with known hypersensitivity to it or any other components of this product. It is also contraindicated in cardiogenic shock, bronchial asthma, sinus bradycardia and greater than first degree block.

Warning and precaution

There have been reports of exacerbation of angina and in some cases, myocardial infarction, following abrupt discontinuance of propranolol therapy. Therefore, when discontinuance of propranolol is planned, the dosage should be gradually reduced over at least a few weeks. Hypersensitivity reactions, including anaphylactic/anaphylactoid reactions, have been associated with the administration of propranolol. In patients without a history of heart failure, continued use of beta blockers can, in some cases, lead to cardiac failure. In general, patients with bronchospastic lung disease should not receive beta-blockers. Chronically administered beta-blocking therapy should not be routinely withdrawn prior to major surgery, however the impaired ability of the heart to respond to reflex adrenergic stimuli may augment the risks of general anesthesia and surgical procedures. Beta-adrenergic blockade may prevent the appearance of certain premonitory signs and symptoms (pulse rate and pressure changes) of acute hypoglycemia, especially in labile insulin dependent diabetics. In these patients, it may be more difficult to adjust the dosage of insulin. Hypoglycemia has been reported in patients taking propranolol after prolonged physical exertion and in patients with renal insufficiency. Propranolol may change thyroid-function tests, increasing T4 and reverse T3 and decreasing T3. Propranolol should be used with caution in patients with impaired hepatic or renal function. Propranolol hydrochloride sustained release capsules are not indicated for the treatment of hypertensive emergencies. Beta-adrenergic receptor blockade can cause reduction of intraocular pressure.

Side effects

Propranolol is usually well tolerated. Minor side effects such as cold extremities, nausea, diarrhea, sleep disturbances and lassitude are often transient. There have been reports of skin rashes and/or dry eyes associated with the use of beta-adrenergic blocking drugs.

Use in pregnancy and lactation

Pregnancy: There are no adequate and well-controlled studies in pregnant women. Intrauterine growth retardation, small placentas and congenital abnormalities have been reported in neonates whose mothers received propranolol during pregnancy. Neonates whose mothers received propranolol at parturition have exhibited bradycardia, hypoglycemia and/or respiratory depression. Propranolol should be used during pregnancy only if the potential benefit justifies the potential risk to the fetus.
Lactation: Propranolol is excreted in human milk. Caution should be exercised when propranolol is administered to a nursing mother.

Use in children and adolescents

Safety and effectiveness of propranolol in pediatric patients have not been established.

Drug interaction

Drug interaction with medication: Caution should be exercised when propranolol is administered with drugs that have an effect on CYP2D6, 1A2 or 2C19 metabolic pathways. Co-administration of such drugs with propranolol may lead to clinically relevant drug interactions and changes on its efficacy and/or toxicity. Blood levels of propranolol may be decreased by co-administration with inducers such as rifampin, ethanol, phenytoin and phenobarbital. The metabolism of propranolol is reduced by co-administration of quinidine. Propranolol can inhibit the metabolism of diazepam, resulting in increased concentrations of diazepam and its metabolites. Concomitant administration of propranolol and warfarin has been shown to increase warfarin bioavailability and increase prothrombin time. The antihypertensive effects of clonidine may be antagonized by beta-blockers. Propranolol should be administered cautiously to patients withdrawing from clonidine.
Drug interaction with food and others: Not applicable.

Overdose

The symptoms of overdose may include bradycardia, hypotension, acute cardiac insufficiency and bronchospasm. Treatment of overdosage include close supervision and supportive therapy.

Storage

Store in a cool (below 30° C) and dry place protected from light. Keep away from the reach of children.

Packing

Indever® 10 tablet: Carton of 200 tablets in blister pack.
Indever® 20 tablet: Carton of 100 tablets in blister pack.
Indever® 40 tablet: Carton of 100 tablets in blister pack.
Indever® SR 40 capsule: Carton of 100 capsules in blister pack.
Indever® SR 80 capsule: Carton of 100 capsules in blister pack.

® Registered Trade Mark

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