BRITEX

Instructions
by medical application medicine

Trade name: Britex.
International generic name:
Brimonidine tartrate + Timolol maleate.
Medicinal form: ocular drops. **Compound:**
Brimonidine tartrate BP 0.20 % w/v;
Timolol maleate USP eq . timolol 0.50% w/v;
Benzalkonium chloride solution NF 0.01% w/v
(quality preservative);
Sterile water basis qs.
Pharmaco-therapeutic group: antiglaucoma combination drug (alpha2-adrenergic agonist + non-selective beta blocker).
Code ATX: S01ED51.
Pharmacological action:
Pharmacodynamics:
Britex is a combination drug containing two active substances: brimonidine - adrenergic agonist, having a stimulating effect on alpha2-adrenergic receptors, and timolol is a beta- adrenergic receptor blocker. Both active substances reduce intraocular pressure (IOP) due to combined interactions, leading to significantly more pronounced hypotensive effect compared with the effect of each from components V separately.
Brimonidine - alpha-adrenergic receptor agonist, Moreover, it has 1000 times greater selectivity in relation to alpha2-adrenergic receptors compared to alpha1-adrenergic receptors. Selectivity is expressed in absence of mydriasis and vasoconstriction vessels microvasculature. Hypotensive effect brimonidine is provided by reducing the formation intraocular fluid and increasing its outflow through uveoscleral ways.
Timolol - non-selective beta-blocker, does not have internal sympathomimetic and membrane-stabilizing activity. Timolol reduces IOP due to reducing the formation of intraocular fluid. Accurate the mechanism of action has not been established; it may be related to inhibition of cyclic adenosine monophosphate synthesis (cAMP) and is caused by endogenous stimulation of beta-adrenergic receptors.
Pharmacokinetics:
Average values of the maximum concentration of the drug in blood plasma (Cmax) of brimonidine and timolol after applications drug Britex were 0.0327 And 0.406 ng /ml respectively.
Brimonidine
When installing a 0.2% solution in the form of eye drops Brimonidine plasma concentrations are very low. Brimonidine is slightly affected metabolism in eye tissues, connection with blood plasma proteins is about 29%. Half-life (T1/2) of the drug after topical application on average - about 3 hours.
The main part of the drug (about 74% absorbed into systemic bloodstream dose) is excreted by the kidneys in the form metabolites V flow 5 days, unchanged a drug urine not is discovered.
Timolol
80% timolol, used as eye drops, hits systemic blood flow by absorption through vessels conjunctiva, nasal mucosa and lacrimal tract. After installation of eye drops, the maximum concentration timolol watery moisture eyes achieved in 1-2 hours. Half-life (T1/2) of timolol in blood plasma is about 7 hours. Timolol slightly contacts With proteins plasma blood. Timolol partially metabolized in the liver; is displayed active substance and his metabolites kidneys.
Indications To application:
• open angle glaucoma;
• ophthalmohypertension (with insufficient effectiveness local therapy beta-blockers).
Contraindications:
• increased sensitivity to components drug;
• increased airway reactivity, including bronchial asthma and episodes of bronchial obstruction, incl. history, severe chronic obstructive disease lungs;
• sinus bradycardia, atrioventricular block II-III degree without an implanted artificial driver heart rhythm, heart failure, cardiogenic shock;
• concomitant therapy with monoamine oxidase inhibitors (MAO), antidepressants - tricyclic and tetracyclic (incl. mianserin);
• age before 18 years;
• period feeding chest.
With caution: renal/liver failure (the use of the drug has not been sufficiently studied in this groups patients); depression, cerebral or coronary insufficiency, Raynaud's syndrome, orthostatic hypotension, thromboangiitis obliterans; heavy unstable cardiovascular diseases; diabetes mellitus, episodes of hypoglycemia (in the absence of therapy); pheochromocytoma (without previous treatment); metabolic acidosis; simultaneous use X-ray contrast agents; intravenous administration lidocaine, blockers of "slow" calcium channels (verapamil, diltiazem) due to risk of depression atrioventricular conduction, development of bradycardia, heart failure and decreased blood pressure pressure; simultaneous administration or dose change medications taken from the group of adrenergic agonists (isoprenaline) And adrenergic blockers (prazosin), A Also others agents affecting adrenergic transmission - according to reason for their possible interaction with active components of the drug or changes in their therapeutic potential.
Pregnancy And period lactation:
Controlled studies to study the use drug Britex at pregnant women women not was carried out. In this regard, if Britex is prescribed for pregnancy until the moment of birth, it is necessary medical control behind condition newborn flow first days life.
Britex can only be used during pregnancy case special necessary.
IN preclinical research established what brimonidine and timolol are excreted in breast milk. Chest feeding on period treatment should stop.
Way applications and doses:
U adults, including elderly patients: locally, bury v conjunctival bag affected eyes 1 drop 2 times a day with an interval of 12 hours.
Britex can be used with others ophthalmic drugs to reduce intraocular pressure. If more than 2 are used drugs, that necessary do 5 minute break between instillations.
As with other eye drops, to reduce possible systemic absorption, short-term pressure on the lacrimal sac in the area is recommended. projections of the lacrimal sac of the eye at the inner corner of the eye or close your eyelids for 2 minutes. This should be done immediately after burying each drops.
Side effects action:
The most common side effects were flushing conjunctiva eyes (near 15% sick) and feeling burning sensation mucous membrane of the eye (approximately 11% of patients). IN in most cases, the severity of these symptoms was weak, discontinuation of therapy was required only in 3.4% and 0.5% cases respectively.
During clinical studies of the composition of the drug The following side effects have been reported, including: frequencies occurrence: Very often (>1/10); often (>1/100,<1/10); rarely(>1/1000, <1/100); Very rarely (< 1/10000).
Co sides organ view: Very often: hyperemia conjunctiva of the eye, burning sensation.
Often: acute burning or stabbing pain, allergic conjunctivitis, erosion corneas, superficial keratitis, eyelid skin itching, folliculosis conjunctiva, violation vision, blepharitis, epiphora, dryness mucous membrane shell eyes, discharge from eyes, pain, irritation mucous membrane shell eyes, feeling foreign bodies.
Infrequently: decline witticisms vision, edema conjunctiva, follicular conjunctivitis, allergic blepharitis, conjunctivitis, floating precipitates vitreous body, asthenopia, photophobia, hypertrophy papillary muscles eyes, soreness century, pallor conjunctiva, edema corneas, infiltrates corneas, gap vitreous bodies.
Mental disorders: often - depression.
Co sides nervous systems: often - drowsiness, headache pain; infrequently - dizziness, syncope.
Cardiovascular systems: often - increased blood pressure; uncommon: stagnant cardiac failure, feeling heartbeat.
From the respiratory systems: uncommon: rhinitis, dryness mucous membrane shell nose
Co sides digestive systems: often - dryness mucous membrane shell cavities mouth; infrequently - perversion taste.
From the skin and subcutaneous fat: often - swelling century, itching skin century, redness skin century; infrequently - allergic contact dermatitis.

Other disorders: often - asthenic condition.

Laboratory indicators: often - promotion activity enzymes liver.
Overdose:
Brimonidine
Overdose with local application: loss of consciousness, decline arterial pressure, bradycardia, hypothermia, cyanosis and apnea.
Overdose at random reception inside: at random ingestion of brimonidine clinical manifestations included: CNS depression, transient confusion consciousness, loss of consciousness or coma, decreased blood pressure, bradycardia, hypothermia and apnea; What entailed behind yourself necessity urgent hospitalization to the emergency department, in some cases - tracheal intubation was performed. Complete restoration functions in everyone declared cases V period from 6 before 24 hours. At overdose, caused by drugs group of alpha2-adrenergic agonists, the following were reported: symptoms: decreased blood pressure, asthenia, vomiting, drowsiness, sedation, bradycardia, arrhythmias, miosis, apnea, hypothermia, respiratory depression, convulsions.
Timolol
Symptoms of a general overdose of timolol: bradycardia, decreased blood pressure, bronchospasm, headache pain, dizziness, cardiac arrest. In clinical The study showed that timolol is not excreted when hemodialysis fully.
If an overdose is diagnosed, it is carried out symptomatic therapy.
Interaction with other drugs:
Special research by study medicinal there were no interactions with Britex. Them however, the possibility of enhancing the effect should be taken into account medicinal funds, oppressive central nervous system (alcohol, barbiturates, derivatives opium, sedatives drugs, are common anesthetics) at simultaneous application with drug Britex. Timolol maybe aggravate compensatory tachycardia and raise risk expressed reduction arterial pressure at application with general anesthetics. Necessary warn anesthesiologist o application drug Britex before upcoming operation.
At simultaneous application timolol and epinephrine maybe development mydriasis.
Beta blockers may enhance hypoglycemic effect of hypoglycemic drugs. They can also mask hypoglycemia.
Hypertensive reaction on sudden cancellation clonidine maybe strengthen on background applications beta blocker. Increased hypotensive effect (for example, decreased heart rate) when timolol is used together with quinidine, it is possible due to Togo, What quinidine slows down metabolism timolol through isoenzyme cytochrome P450, CYP2D6.
Combined use of beta-blockers with medications for general anesthesia may hide compensatory tachycardia and increase the risk a pronounced decrease in blood pressure, therefore anesthesiologist necessary warn o application patient drug Britex.
Cimetidine, hydralazine, ethanol may increase concentrations timolol plasma blood.
Medications must be used with caution drugs that affect metabolism and uptake of circulating catecholamines, e.g. Chlopromazine, methylphenidate, reserpine. Related taking MAO inhibitors is contraindicated. sick, receiving MAO inhibitors, treatment with the drug Britex can be prescribed 14 days after cancellations inhibitor MAO.
Potentiation of the effects of joint the use of eye drops containing timolol, and calcium blockers taken orally channels, guanethidine or beta blockers, antiarrhythmic drugs, cardiac glycosides or parasympathomimetics, which was manifested by pronounced decreased blood pressure and/or severe bradycardia. After using brimonidine for a very in rare cases (<1/10000) a decrease in blood pressure. In this regard, it is necessary to use Britex with caution with medications possessing systemic hypotensive action.
Special instructions:
Do not touch the tip of the bottle to surfaces to avoid infection of the eye and bottle contents. Like all ophthalmic drugs applied topically, Britex can be absorbed systematically.
If allergic reactions occur, treatment with the drug Britex must be discontinued.
In patients with severe renal impairment, patients on hemodialysis, treatment with timolol accompanied by a pronounced decrease in arterial pressure.
While taking a beta-blocker drug, patients with agony and severe anaphylactic reactions to various allergens in history, possible decrease or lack of effectiveness from the administration of epinephrine in commonly used doses. Beta blockers may also mask symptoms hyperthyroidism and worsen Prinzmetal's angina, vascular diseases, both peripheral and central, a also arterial hypotension.
Signs indicating acute hypoglycemia include: in particular, tachycardia, palpitations and sweating may camouflage on background therapy beta blockers.
If necessary, discontinuation of drug therapy Britex, as well as in the treatment of cardiovascular diseases with systemic beta-blockers, therapy is discontinued gradually to avoid the development heart rhythm disturbances, myocardial infarction and/or sudden death, the risk of which increases with sudden cancellation drugs given groups.
The excipient benzalkonium chloride contained in the drug Britex may have irritating effect on the mucous membrane of the eyes. Before after installing the drug Britex, you must remove contact lenses, again their can dress through 15 minutes. Term the shelf life of the drug after the first opening of the dropper bottle is 28 days. After the specified It is recommended to throw away the dropper bottle after even if it still contains a residual amount drug. This is necessary in order to avoid danger of infection. On cardboard packaging for patients recommended write down date autopsies bottle.
Influence on ability management transport means and mechanisms:
Britex has little effect on ability to drive vehicles and mechanisms. During treatment with Britex possible transient visual impairment (blurredness), development of episodes of weakness and drowsiness, which may have adverse impact if the patient's work involves potentially hazardous activities. If these symptoms occur, you should refrain from execution dangerous species activities.
Form release:
Eye drops 10 ml in a plastic dropper bottle. One bottle along with instructions for use in cardboard packaging.
Conditions storage:
Keep dry, protected from Sveta place, at temperature not higher than 25 °C and in places inaccessible to children.
Term validity:
Specified on packaging.
Not use by expiration deadline suitability.
Conditions holidays:
By recipe doctor

Made for:
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