

EUPHYLONG® 250

Active ingredient: Theophylline

Composition

1 controlled-release capsule contains:

Active ingredient

Theophylline 250 mg

Excipients

Talc; methylcellulose; microcrystalline cellulose; carmellose sodium; cellulose acetate; triethyl citrate; lactose monohydrate; gelatin; purified water; titanium (IV)-oxide (E 171); indigo carmine (E 132); printing ink.

Information for diabetics:

1 Euphylong 250 controlled-release capsule contains 16.8 mg lactose monohydrate (corresponding to 0.001 BU).

Pharmaceutical form and contents

Packs with 20 and 100 controlled-release capsules

Pharmacotherapeutic / indication group / action mechanism

Agent for the treatment of asthma (bronchodilator)

Holder of the marketing authorization

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Manufacturer

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Indications

Treatment and prophylaxis of respiratory distress caused by always obstruction (bronchoconstriction) in bronchial asthma and chronic obstructive diseases of the respiratory tract.

Central breathing regulation disturbances (e.g. sleep apnoea). Products with controlled theophylline release, such as Euphylong 250 are not suitable for the acute treatment of asthmatic crisis (severe bronchial asthma attacks) or of acute bronchospasm (attacks of dyspnoea caused by bronchoconstriction).

Contraindications

Euphylong 250 must not be used in cases of

- known hypersensitivity to the active ingredient or any of the other constituents
- recent myocardial infarction
- acute tachyarrhythmia (heart rhythm disturbance with accelerated heart beat).

The situations in which Euphylong 250 may be used only under certain circumstances and with particular care are described below. If you have any questions, ask your doctor. This also applies if you have had previous experience of the conditions described below.

Euphylong 250 must be used with care and under medical supervision in the presence of

- unstable angina pectoris (coronary artery disease)
- tendency to tachyarrhythmia (heart rhythm disturbances)
- severe hypertension
- hypertrophic obstructive cardiomyopathy (chronic disease of the heart muscle)
- hyperthyroidism (hyperactivity of the thyroid)
- epilepsy
- gastric and/or duodenal ulcer
- porphyria (specific metabolic disturbance)
- liver and kidney function disturbances.

Special warnings and precautions for use

The use of Euphylong 250 in elderly and/or seriously ill patients is associated with an increased risk of intoxication and therefore should be checked by blood level controls (see also dosage guidelines).

Because of its high active ingredient content, Euphylong 250 is not suitable for children under 6 years. Other drug presentations are available for this group.

Pregnancy and lactation

As experience with the use of theophylline during the first trimester of pregnancy is still insufficient, the use of theophyllin during this period should be avoided.

During the second and third trimester, theophylline should be used only after careful consideration of the risks and benefits by the treating doctor, as it passes into the circulation of the fetus and can thus have therapeutic effects.

If a patient is treated with theophylline at the end of pregnancy, uterine contractions may be inhibited. Prenatally exposed neonates must be carefully monitored for drug effects.

Theophylline passes into breast milk. For this reason, the therapeutic theophylline dose for a breastfeeding patient should be kept as low as possible. Breastfeeding should whenever possible occur immediately before dosing. The breastfed baby must be carefully monitored for possible effects of theophylline. If higher therapeutic doses should be necessary, breastfeeding must be discontinued.

Effects on the ability to drive and to use machines or to work without firm support

Even when taken in accordance with the instructions, Euphylong 250 can affect the speed of reaction to such an extent that fitness to drive, operate machinery, or work without a firm foothold is impaired. This applies particularly in combination with alcohol, or with other medication affecting the speed of reaction.

Interactions

Theophylline acts synergistically with other xanthine-containing medicines, beta-sympathomimetics, caffeine, and similar substances.

Degradation of theophylline may be accelerated and/or its bioavailability and efficacy reduced in smokers and in cases of concomitant administration of barbiturates, especially phenobarbital or pentobarbital, carbamazepine, phenytoin, rifampicin, primidone, sulfapyrazone, and hypericin-containing agents (medicines of St. John's wort). It may be necessary to increase the theophylline dose in some cases.

Degradation of theophylline may be delayed and/or its plasma concentration may be elevated - with increased risk of overdose and side effects - on simultaneous use of the following medicinal products: oral contraceptives, macrolide antibiotics (e.g. erythromycin, clarithromycin, josamycin, and spiramycin), quinolones (gyrase inhibitors) (see below), imipenem, isoniazid, thiazendazole, calcium-channel blockers (e.g. verapamil or diltiazem), propranolol, mexiletine, propafenone, ticlopidine, cimetidine, allopurinol, flvoxamine, alpha-interferon, zafirlukast and influenza vaccine. It may therefore be necessary to reduce the dose of theophylline in such cases.

There have also been isolated reports of symptoms of theophylline overdose after use concomitantly with ranitidine. Since an interaction cannot be ruled out with sufficient degree of certainty, the theophylline dose should be carefully tailored to the individual on concomitant use of ranitidine.

When theophylline is administered simultaneously with ciprofloxacin the theophylline dose should be reduced to no more than 60% of the recommended dose, and with enoxacin to no more than 30% of the recommended dose. Other quinolones (e.g. pefloxacin or piperidic acid) may also potentiate the action of medicines containing theophylline. Frequent checks of the theophylline concentration are therefore strongly recommended during concomitant treatment with quinolones.

Please note that this information also applies to drugs which you might have used recently.

The action of lithium carbonate and beta-blockers may be attenuated if theophylline is taken at the same time.

Theophylline potentiates the effects of diuretics.

Administration of halothane in patients receiving theophylline may lead to severe heart rhythm disturbances.

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Dosage and method of administration

The following information applies unless Euphylong 250 has

THIS IS A MEDICAMENT

A medicament is a product which affects your health and its consumption contrary to instructions is dangerous for you. Follow strictly the doctor's prescription, the method of use and the instructions of the pharmacist who sold the medicament.

- The doctor and the pharmacists are the experts in medicines, their benefits and risks.
- Do not by yourself interrupt the period of treatment prescribed.
- Do not repeat the same prescription without consulting your doctor
- Keep all medicaments out of the reach of children.

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When determining the initial dose, any previous treatment with theophylline or its compounds must be taken into account with regard to a dose reduction. The dose is determined taking the ideal weight as the patient's body weight, since theophylline is not absorbed by fatty tissue.

The daily maintenance dose for adults is about 11-13 mg theophylline per kg body weight. Because of faster theophylline elimination, children over 6 months and smokers require higher doses of theophylline per body weight than non-smoking adults. In babies under 6 months and in the elderly (over 60 years), however, theophylline excretion is prolonged. The dosage for patients who stop smoking should be chosen with care because of a rise in the theophylline concentration.

Excretion of theophylline is very often prolonged in patients with heart failure, severe oxygen deficiency, impaired liver function, pneumonia, or viral infections (especially influenza), in the elderly, and during concomitant treatment with other medicines (see "Interactions"). In severe renal function disturbances, theophylline metabolites may accumulate. Lower doses are therefore required in these cases, the dosage being increased with particular care. Furthermore, reduced theophylline excretion has been reported after vaccination against tuberculosis and influenza, and so a dose reduction may be necessary during concomitant treatment.

Recommended dosage:
Unless otherwise prescribed, the following age-related maintenance doses are recommended:
If a theophylline product without controlled release is to be replaced by one with controlled release, it must be borne in mind that it may be possible to reduce the daily dose.

When determining the initial dose, any previous treatment with theophylline or its compounds must be taken into account with regard to a dose reduction. The dose is determined taking the ideal weight as the patient's body weight, since theophylline is not absorbed by fatty tissue.

Unless otherwise prescribed, the following age-related maintenance doses are recommended:
If a theophylline product without controlled release is to be replaced by one with controlled release, it must be borne in mind that it may be possible to reduce the daily dose.

Age (years)	Body weight (kg)	Daily dose (mg theophylline/kg body weight)
Children		
6 - 8	20-25	24
8-12	25-40	20
Adolescents		
12-16	40-60	18
Adults	50-70	11-13

If symptoms of overdose occur, depending on the severity of these symptoms the next dose should be missed or reduced by 50%. The treating doctor should be consulted for any dose adjustment.

The usual dose is 1-2 capsules (250-500 mg theophylline) once or twice a day. Patients with nocturnal dyspnoea may take the daily dose (maximum 2 capsules) as a single dose in the evening.

Note:

Treatment should if possible begin in the evening, shortly before going to bed, and the dosage should be increased slowly over 2-3 days.

You should take Euphylong 250 only at your doctor's instructions; the dose should be increased or reduced only at the doctor's instructions.

The duration of use depends on the nature, severity and course of the condition and is determined by the doctor.

Instructions for use / handling

The capsule should be swallowed whole with plenty of liquid. If you have difficulty swallowing capsules open the capsule and swallow the contents whole with plenty of liquid.

The daily dose is usually taken as a single dose in the evening before going to bed, or is divided into two doses, the additional dose being taken in the morning with breakfast.

Incorrect use and overdose

In the case of overdose of Euphylong 250 with therapeutic plasma theophylline concentrations of up to 20 mg/l, side effects such as gastrointestinal complaints (nausea, stomach pains, vomiting, diarrhoea), excitability of the central nervous system (restlessness, headaches, insomnia, dizziness), and cardiac disturbances (heart rhythm disturbances) may occur which, depending on individual susceptibility, are generally mild to moderate.

At plasma theophylline concentrations above 20 mg/l the same symptoms are generally observed, but with greater intensity. Above 25 mg/l central-nervous and cardiac complaints as severe as convulsions, severe heart rhythm disturbances, and cardiovascular failure may occur. Such reactions may not necessarily be heralded by the occurrence of milder side effects.

Patients with elevated individual susceptibility to theophylline may experience more severe overdose symptoms even at plasma concentrations below those mentioned here.

If overdose with Euphylong 250 is suspected, a doctor must be notified immediately. He will then decide, depending on how recently the capsules were taken, what intensive care treatment is necessary.

In the treatment of life-threatening heart rhythm disturbances with propranolol it is important to remember that the product can trigger severe bronchospasm in asthmatics. In such situations it is advisable to use verapamil instead.

In particularly severe cases of intoxication, detoxification can be accomplished by haemoperfusion or by haemodialysis.

Further options for treating intoxication with theophylline are determined by the severity and clinical course and by the patient's symptoms.

If you have taken too little Euphylong 250 or have forgotten a dose, do not take twice as much the next time, but discuss this with your doctor and continue taking the medication in accordance with the dosage instructions.

If treatment is interrupted or discontinued suddenly (withdrawal), you must notify your doctor immediately, as there is a danger you might not be receiving adequate treatment.

Undesirable effects

Headaches, states of excitation, tremor in the extremities, restlessness, insomnia, rapid or irregular heart beat, palpitations (subjective sensation of an unduly rapid or irregular heart beat), a drop in blood pressure, gastrointestinal problems, nausea, vomiting, diarrhoea, increased diuresis, changes in serum electrolytes, especially hypokalaemia, elevated serum calcium and serum creatinine, hyperglycaemia (increased blood glucose values) and hyperuricaemia (increased uric acid values).

Hypersensitivity reactions to theophylline are rare.

A weakening of muscle tone in the lower oesophageal sphincter may potentiate existing nocturnal gastroesophageal reflux (reflux of stomach contents into the oesophagus).

Side effects may be more intense in the presence of hypersensitivity to theophylline or overdose (plasma theophylline concentrations above 20 mg/l).

In particular, plasma theophylline levels exceeding 25 mg/l may produce toxic side effects such as convulsions, a sudden drop in blood pressure, ventricular arrhythmias (heart rhythm disturbances), and severe gastrointestinal phenomena (e.g. gastrointestinal bleeding).

If you experience any undesirable effects not mentioned in this leaflet, please inform your doctor or pharmacist.

Countermeasures

At the first signs of a hypersensitivity reaction you must stop taking Euphylong 250 and notify your doctor, so that he can assess the severity of this reaction and decide what further measures are necessary.

Storage conditions and shelf life

Euphylong 250 controlled-release capsules stored below 30°C remain unchanged for 3 years. The expiry date of this pack is printed on the container and on the folding box. Do not use this pack after the expiry date!

Date of last revision of the text

September 2004