XANTHIUM 200 - XANTHIUM 400

NAME OF THE MEDICINAL PRODUCT

XANTHIUM 200 Capsule
XANTHIUM 400 Capsule
INN : Theophylline monohydrate

COMPOSITION

XANTHIUM 200

Theophyllin. = 200 mg anhydric. - microcrystalline cellulose - Polyvidon. -Sucros. stearas - Polyvidon. - Polymeris. methacrylat. - Titan. dioxid. - Magnes. stearas - Polymeris. acrylat. siccum - Polysorbat. 80 - Simeticon. emulsio siccum - Gelatin.- Titan. dioxid. q.s.pro caps.gel. una.

XANTHIUM 400

Theophyllin. = 400 mg anhydric. - microcrystalline cellulose - Polyvidon. - Sucros. stearas - Polyvidon. - Polymeris. methacrylat. - Titan. dioxid. -Magnes. stearas - Polymeris. acrylat. siccum - Polysorbat. 80 - Simeticon.emulsio siccum - Gelatin. - Titan. dioxid. q.s.pro caps. gel. una.

PHARMACEUTICAL FORMS AND OTHER PRESENTATIONS XANTHIUM 200

Box of 60 capsules and Unit-dose of 200 mg of anhydrous theophylline, packaged in thermoformed strip packs.

XANTHIUM 400

Box of 60 capsules and Unit-dose of 400 mg of anhydrous theophylline, packaged in thermoformed strip packs.Oral administration.

PHARMACOTHERAPEUTICAL GROUP Long acting bronchodilator.

INDICATED IN

Treatment and prevention of bronchospasms (spasmodic contraction of the bronchus) associated with asthma, chronic bronchitis, and emphysema(destruction of the alveoli of the lung wall). This drug is not indicated in the treatment of acute asthmatic crisis.In case of an acute crisis, your physician should indicate more appropriate drugs.

CONTRAINDICATIONS

Children under 6 years old.
Allergy to theophylline, aminophylline or other xanthines (theobromine, caffeine).

Hypersensitivity to one excipient of the preparation.

SPECIAL PRECAUTIONS

Do not open the capsules and do not crunch the microgranules inside the capsules.

Do not take a stronger dose without prescription from your physician. Use with caution in case of heart disease, liver failure, lung disease, renal failure, acute virosis, thyroid troubles, headaches and gastro-duodenal ulcer or progressive ulcer in elderly patients.

In case of asthmatic crisis, the administration of any other drugs containing theophylline and the increase of the prescribed quantity of capsules should be avoided.

Use with caution in case of epilepsy.

If you are taking a product or a drug containing St. John's wort (Hypericu perforatum), you should stop taking it BEFORE starting a treatment with XANTHIUM.

If you are simultaneously treated with a drug or a product containing St. John's wort (Hypericum perforatum) and XANTHIUM, you should not stop taking St. John's wort before consulting your physician because this decision might require a change in the posology of XANTHIUM.

INFORMATIONS TO MEDICAL STAFF

Because of the narrowness of the therapeutical range, patients treated with long acting theophylline might quickly reach a toxic level after an intravenous injection of theophylline in case of acute crisis.

This danger of overdose must be taken into account. Crisis should be treated with a Beta-sympathomimetic substance.Because of the significant interindividual variations of the theophylline metabolism, doses must be changed according to undesired reactions and (or) blood levels.

INCOMPATIBILITIES

No physico-chemical incompatibility is known up to now.

INTERACTIONS WITH OTHER DRUGS OR FOODSTUFFS

The association with sympathomimetic substances by inhalation reduces the posology of both substances and therefore reduces the risk of undesired effects.
Theophylline might increase cardiac effects if in association with digitalic drugs.

Some drugs might reduce the time of elimination of theophylline and therefore might provoke the appearance of toxic levels.

That is why the following drugs shall require a decrease in the theophylline dosages :

øAntibiotics (erythromycin, troleandomycin, lincomycin, clindamycin),
øAntiulceratives and antacids (cimetidine, aluminium gels),
øb-blockers (propranolol, labetalol, alprenolol, oxprenolol),
øOther drugs (viloxazine, diltiazem, interferon alpha-2a, ticlopidine, fluvoxamine, disulfiram, ranitidine).

Other drugs increase the time of elimination of theophylline and therefore require an increase in the dosages :

øHypnotics and anti-epileptics (barbiturates, phenytoin, carbamazepine ...),
øAminoglutethimide
øA patient should inform his/her physician if he/she is a regular smoker becausein that case, the dosage might be increased. He/She must also inform him/her about his/her decision of giving up smoking because theophylline dosages shall be reduced.
øThe dosages of some antidepressants (lithium carbonate) will be increased with theophylline.

The association of theophylline with ephedrine and amphetamine -like anorexiants is not recommended because the undesired effects of those substances add up.

øQuinolones, oral contraceptives, tacrine, verapamil and the antiflu vaccine might provoke an increase of the theophylline level.
øRifampicine might provoke a decrease of the theophyllinelevel.
øAn interaction has been observed between St. John's wort (Hypericum perforatum) and the substance contained in XANTHIUM. This interaction should be due to an action on some enzymes of the liver. The intake of a drug or product with St. John's wort (Hypericum perforatum) must be avoided with XANTHIUM.
-Theophylline is an antagonist of the pharmacologic action of benzodiazepines.
Furosemide might provoke a decrease or an increase of the theophylline levels.

Simultaneous administration of adenosine and theophylline might stop the electrophysiologic effects of adenosine.

-An excessive consumption of caffeine (more than 6 to 10 cups of coffee) might inhibit the metabolism of theophylline.

-A fatty meal might increase the absorption of theophylline and a meal with many carbohydrates might decrease its absorption.

In all cases of simultaneous administration of theophylline with one of the above-mentioned drugs, the physician will be informed and will adapt the dosage.

USE IN CASE OF PREGNANCY AND BREAST-FEEDING

Except on advice by your physician, it is not recommended to take theophylline during pregnancy and breast-feeding. The intake of theophylline during the end of pregnancy can cause to the newborn symptoms such as nausea, feeding difficulties, irritability. Intake during breast-feeding may cause to the newborn symptoms such as irritability, excitability, and insomnia.

EFFECTS ON ABILITY TO DRIVE AND USE MACHINES No contraindication is known up to now.

DOSAGE

It is necessary to follow the treatment prescribed by your physician because each patient receives a treatment adapted to his/her personal case. The physician will decide of the quantity of theophylline in the blood.

The doses usually recommended in adults and children above 6 years old are outlined in the following table :

Age groups	Dosage of anhydrous theophylline in mg/kg/day*	Dosage of anhydrous theophylline in mg/day	Dosage strength and number of XANTHIUM capsules per day		
			200 mg	300 mg	400 mg
6 to 9 years	20 mg/kg/day	400 mg	2	-	or 1
9 to 12 years	18 mg/kg/day	400 to 600 mg			
		400 mg	2	-	or 1
		500 mg	1 +	1	
		600 mg	-	2	-
12 to 16 years	16 mg/kg/day	600 to 800 mg			
		600 mg	-	2	-
		700 mg	-	1 +	1
		800 mg	-	-	2
above 17 years	10 mg/kg/day	600 to 1000 mg			
years old		600 mg	-	2	-
		700 mg	-	1 +	1
		800 mg	-	-	2
		900 mg	-	3	-
		1000mg	-	2 +	1
Elderly	6 to 8 mg/kg/day	400 to 600 mg			
patients		400 mg	2	-	or 1
		500 mg	1 +	1	-
		600 mg	-	2	-

*** In overweight patients, ideal body weight should be used to calculate dosages.**

If XANTHIUM is administered in one daily dose, the prescribed capsules are to be taken orally at one time, in the morning or in the evening, at the same time of the day with or without accompanying.

If the physician thinks that it is better to give the drug twice a day, the capsules will be taken in the morning and in the evening with an interval of 12 hours and in the same conditions regarding the meals.

In all ways of administration, do not open the capsules and do not crunch or crush their content.

ADMINISTRATION

XANTHIUM capsules are taken orally.

OVERDOSAGE

The intake of excess theophylline can produce the following symptoms:
digestive disorders (nausea,vomiting, stomach pain, diarrhea, blood vomiting),nervous troubles (excessive excitation, restlessness, nervousness, confusion), cardiac disorders (palpitation, rhythmic troubles, hypotension or hypertension).
A more severe intoxication can cause convulsions. The risk of overdose is most frequent in the case of elderly people and in the case of persons with liver disorders, heart deficiency or prolonged fever.
The physician should be informed if one of these troubles appears.
If it seems to be an intoxication, it might be necessary to go to hospital.

Theophylline intoxication will be treated by gastric emptying or by using activated charcoal ; sedatives (diazepam, for example, 5-10 mg in I.V. (children 0.1 to 0.2 mg/kg in intravenous injection) will be administered in case of convulsions ; oxygenation, keeping of blood pressure, treatment of dehydration(keeping of the hydroelectrolytic balance), hemoperfusion with resins.

A hemoperfusion is necessary if theophylline levels are above :
ø40 to 60 mg/ml in a patient already treated,
ø80 mg/ml in a non treated patient,
ø50 mg/ml in a patient above 60 years old or in case of cardiac or hepatic failure.

A hemodialysis is as efficient as a hemoperfusion.

UNDESIRED EFFECTS

Those effects are often due to overdose and can be the following :

øgastrointestinal troubles : nausea, stomach pain, vomiting, diarrhea, absence of appetite, blood vomiting, peptic and esophageal ulcer ;
troubles of the central nervous system : insomnia, nervousness,
øheadaches, irritability, tremor, convulsions ;

øendocrinal/metabolic troubles : hypokalemia, hyperglycemia, hypophosphatemia, hypomagnesemia, secretion of antidiuretic hormones, lipidic abnormalities, porphyria ;
øcardio-vascular troubles: rythmic troubles, hypotension or hypertension, palpitations, red spots ;
ørespiratory troubles: breath acceleration, breath stopping, respiratory alcalosis
potential allergic reaction: urticaria, pruritus with thrombocytopenia and bleeding tendencies.

Less often, contact dermatitis, exfoliative erythrodermia with bronchospasm.

If you notice undesired effects that are not mentioned in this leaflet, please inform your physician or pharmacist.

STORAGE

XANTHIUM should be stored at temperature below 25oC.
Do not use beyond the expiry date indicated on the sales pack.
Example : Exp 08/2002 means that the expiry date is 1st August 2002.
Keep out of the reach of children

DATE OF THE LAST UPDATE OF THE LEAFLET 2nd May 2002.