Package leaflet: Information for the patient

Ethosuximide neuraxpharm 50 mg / ml oral solution

Ethosuximide

Read all of this leaflet carefully before you start taking this medicine because it contains important information for you.
- Keep this leaflet. You may need to read it again.
- If you have any further questions, ask your doctor or pharmacist.
- This medicine has been prescribed for you. Do not pass it on to others. It may harm them, even if their signs of illness are the same as yours.
- If you get any side effects, talk to your doctor or pharmacist. This includes any possible side effects not listed in this leaflet. See section 4.

What is in this leaflet

1. What Ethosuximide neuraxpharm is and what it is used for

Ethosuximide neuraxpharm is a medicine for the treatment of epileptic fits (anti-epileptic).

Ethosuximide neuraxpharm is used to treat
- Pyknoleptic absences and complex and atypical absences.
- Myoclonic-astatic petit mal and myoclonic fits of adolescents (impulsive petit mal), if other medicines are not effective and/or are not tolerated.

2. What you need to know before you take Ethosuximide neuraxpharm

Do not take Ethosuximide neuraxpharm oral solution
- if you are allergic to ethosuximide, other succinimides (group of medicines to which ethosuximide belongs) or any other ingredients of this medicine listed in section 6.

Warnings and precautions
Talk to your doctor before taking Ethosuximide neuraxpharm.

- If you experience movement disorders (see section 4) do not continue taking Ethosuximide neuraxpharm. Please contact the nearest doctor who, in the event of significant disturbances, can administer diphenhydramine as an antidote by the intravenous route.

- Pay special attention to symptoms of bone marrow damage such as fever, inflammation of throat or pharynx tonsils as well as haemorrhagic tendency, and consult your doctor if you experience any of these symptoms.
  Your blood count should be checked regularly (initially monthly, after one year every six months) to identify potential bone marrow damage. At a leucocyte count (number of white blood cells) of less than 3500/mm3 or a granulocyte ratio of less than 25% the dose should be reduced or Ethosuximide neuraxpharm discontinued completely. Your liver enzymes should also be checked regularly.

- Psychiatric side effects (anxiety, illusion) can occur in particular in patients with a history of psychiatric disorders. Special caution is required when Ethosuximide neuraxpharm is administered to this group of patients.

- A small number of patients treated with anti-epileptics such as ethosuximide have developed thoughts about self-harm or suicidal thoughts. If at any time during the treatment you have such thoughts, tell your doctor immediately.

- Serious skin reactions including Stevens-Johnson syndrome and drug reaction with eosinophilia and systemic symptoms (DRESS) have been reported in association with ethosuximide treatment. Stop using Ethosuximide neuraxpharm and seek medical attention immediately if you notice any of the symptoms described in section 4.

Note: To prevent grand mals which are often associated with complex and atypical absences, ethosuximide can be combined with effective anti-epileptics (e.g. primidone or phenobarbital). Additional grand mal prophylaxis can be dispensed with only in the case of pyknoleptic absence epilepsies in children of school age.

Other medicines and Ethosuximide neuraxpharm
Tell your doctor or pharmacist if you are taking/using, have recently taken/used or might take/use any other medicines.

What other medicines affect the efficacy of Ethosuximide neuraxpharm?
In patients also taking carbamazepine (medicine for the treatment of epileptic fits), the plasma clearance (excretion rate) of ethosuximide, the active substance of Ethosuximide neuraxpharm, may be elevated. In patients taking valproic acid (medicine for the treatment of epileptic fits), the concentration of ethosuximide in blood may rise.
It cannot be excluded that CNS depressants and Ethosuximide neuraxpharm mutually potentiate their sedative (calming and sleep inducing) effects.

The efficacy of what other medicines is affected by Ethosuximide neuraxpharm?
Ethosuximide, the active substance of Ethosuximide neuraxpharm, normally does not change the concentration of other medicines for the treatment of epileptic fits (e.g. primidone, phenobarbital, phenytoin) in blood. In individual cases the phenytoin level in blood may rise, however.

Ethosuximide neuraxpharm with alcohol
Alcohol can change and potentiate the effects of Ethosuximide neuraxpharm in an unforeseeable manner.
Do not drink alcohol or consume alcohol-containing food while you take Ethosuximide neuraxpharm!

Pregnancy and breast-feeding
If you are pregnant or breast-feeding, think you may be pregnant or are planning to have a baby, ask your doctor or pharmacist for advice before taking this medicine.

Pregnancy
If you are of childbearing age, you should be advised by your doctor regarding the necessity of planning and monitoring any pregnancy before starting the treatment with Ethosuximide neuraxpharm. Do not discontinue Ethosuximide neuraxpharm without first consulting your doctor as epileptic seizures might recur, which could harm you and/or your unborn child.

No specific malformations of babies are known, which were caused by the treatment with ethosuximide. However, patients treated with medicines against epileptic seizures generally have a higher risk for malformations than other women. The most commonly reported malformations are cleft lip, cardiovascular malformation and neural tube defects (spina bifida). This risk is even higher in patients treated with more than one anti-epileptic, and therefore combination treatment should be avoided during pregnancy.

Prenatal diagnostic measures like high level ultrasound and the determination of α-fetoprotein are recommended for the early detection of foetal damage.

The lowest effective ethosuximide dose ensuring seizure control must not be exceeded, particularly from the 20th to the 40th day of pregnancy. Your ethosuximide serum concentration must be checked regularly. You should take extra folic acid if you are planning to have a baby or if you are pregnant.

To prevent vitamin K1 deficiency in your baby and bleeding caused by this deficiency, you should also be given vitamin K1 during the last month of your pregnancy.

Breast-feeding
Ethosuximide passes into breast milk and might lead to sedation, poor suckling and irritability in breast-fed infants. Therefore, you should stop breast-feeding during treatment with Ethosuximide neuraxpharm.

Driving and using machines
Ethosuximide can impair reactivity. Therefore, the following should be considered throughout the treatment period, in particular, however, during the adjustment phase: You are not able to respond quickly and purposefully to unexpected and sudden events. Do not drive cars or other vehicles! Do not operate dangerous electric tools or machines! Do not work without a secure hold!

The decision about whether you are able to drive and use machines will be taken in each case by your doctor considering your individual response to the medicine. Be advised that alcohol further impairs your driving capacity.

Ethosuximide neuraxpharm oral solution contains methyl-4-hydroxybenzoate (E218) and propylene glycol (E1520)
- Methyl-4-hydroxybenzoate may cause allergic reactions (possibly delayed).
- This medicine contains 1.0 mg propylene glycol in each 1 ml. If this medicine has been prescribed for a baby that is less than 4 weeks old, talk to your doctor or pharmacist before giving them this medicine, in particular if the baby is given other medicines that contain propylene glycol or alcohol.

3. How to take Ethosuximide neuraxpharm

Always take this medicine exactly as your doctor has told you. Check with your doctor or pharmacist if you are not sure.

Dosage
Unless otherwise prescribed by your doctor, the recommended dose is:

Adults, elderly patients and children over 6 years of age:
The treatment is started at a daily dose of 500 mg (10 ml). Depending on the patient's tolerance, the dose is increased every five to seven days in increments of max. 250 mg (5 ml) until the fits are controlled by a daily dose of 1000-1500 mg (20-30 ml). In an individual case, a daily dose of 2000 mg (40 ml), divided into several single doses, may be required.

The therapeutic plasma level of ethosuximide is normally between 40 and 100 µg/ml. However, the dose depends on the patient's clinical response. The half-life of ethosuximide in plasma is more than 24 hours and the daily dose can be taken as a single dose provided the medicine is well tolerated. Higher daily doses should be divided and taken in 2 or 3 single doses, however.
The decision about changes to the dosage regimen can be taken by your doctor only.

The risk of side effects which depend on the dose taken can be reduced by taking small initial doses of Ethosuximide neuraxpharm and increasing them gradually to optimum amounts (increasing the amounts slowly from day to day) and by taking them during or after meals.

Haemodialysis patients
Ethosuximide is dialysable. Haemodialysis patients therefore require a supplementary dose or a modified dosage regimen. During a dialysis period of four hours, 39% to 52% of the dose taken is removed.

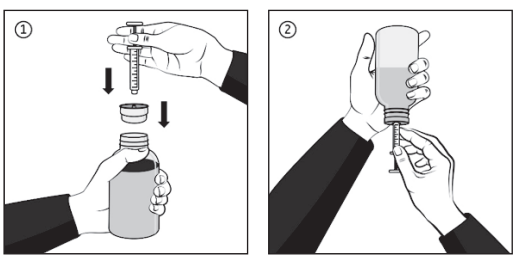
Children
Children under 2 years: The treatment is started at a daily dose of 125 mg (2.5 ml). The dose is increased gradually in small increments every few days until the fits are controlled.

Children between 2 and 6 years of age: The treatment is started at a daily dose of 250 mg (5 ml). The dose is increased gradually in small increments every few days until the fits are controlled.
The optimum daily dose for most children is 20 mg/kg. The maximum dose is 1000 mg (20 ml).

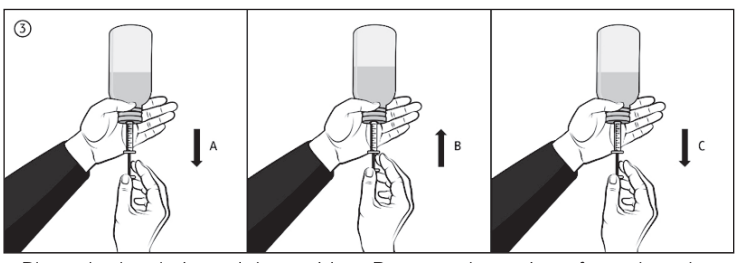
Method of administration
Ethosuximide neuraxpharm is for oral use.
The solution can be taken during or after meals.

Instructions for use
- The pack contains a graduated oral syringe (0.5 ml steps) and an adapter for the oral syringe.
- Opening of the bottle: Turn the screw cap anti-clockwise.
- Insert the adapter in the bottle neck (Fig. 1). Make sure that the adapter is tightly fitted.
- Insert the oral syringe in the opening of the adapter (Fig. 1).

- Turn the bottle upside down (Fig. 2).



- Transfer a small amount of the solution into the syringe by pulling out the piston a short distance (Fig. 3A). Push the piston back to remove any air bubbles (Fig. 3B). Now pull the piston as far as to the millilitre (ml) level corresponding to the dose prescribed by your doctor (Fig. 3C).



- Place the bottle in upright position. Remove the syringe from the adapter.
- Transfer the content of the syringe into a glass of water by pushing the piston into the syringe as far as to stop position (Fig. 4). The dose can also be mixed with milk pudding.
- Drink up the glass.
- Alternatively, the drug dose can directly be applicated into the mouth. The patient should sit upright and the syringe piston should slowly be pressed into the syringe so that the patient can swallow well (Fig. 5). After having taken the medicine, the patient should drink half a glass of water.
- Rinse the syringe using water only (Fig. 6).

- Close the bottle with the screw cap.

How long to take Ethosuximide neuraxpharm
The treatment of epileptic fits is principally a long-term treatment. The dose, the distribution of the daily dose, the duration of treatment and discontinuation of Ethosuximide neuraxpharm are determined by a specialist with experience in the treatment of epilepsy.

If you take more Ethosuximide neuraxpharm than you should
If by mistake you have taken a double dose Ethosuximide neuraxpharm, do not change your dosage regimen, but continue taking Ethosuximide neuraxpharm as prescribed. Significantly higher doses potentiate effects such as tiredness, lethargy (lack of drive, apathy), depressive states and states of agitation, in some cases also irritability as well as any other side effects depending on the quantity taken (overdose effects may occur at concentrations over 150 µg ethosuximide per ml blood).

Overdose symptoms are potentiated by alcohol and other CNS depressants.

If any of these symptoms occur, contact the nearest doctor and, if possible, present the medicine taken and the package leaflet.

If a significant overdose was taken, the doctor will perform gastric lavage and administer medicinal charcoal. Monitoring of the cardiovascular and respiratory systems in an intensive care unit is required.

If you forget to take Ethosuximide neuraxpharm
Do not take a double dose to make up for the forgotten dose.
Normally no symptoms will appear when you forgot to take a single dose. Continue taking the medicine as prescribed, i.e. do not take the forgotten dose at a later time. Be advised, however, that Ethosuximide neuraxpharm will control your state safely and appropriately only when taken regularly!

If you stop taking Ethosuximide neuraxpharm
If you wish to discontinue the treatment, talk to your doctor first. Do not stop taking the medicine without checking with your doctor, as this may jeopardise the success of the treatment.
Strictly follow the treatment recommendations of your doctor, as otherwise you may have again epileptic fits!
If you think that you do not tolerate Ethosuximide neuraxpharm, please contact your doctor!

If you have any further questions on the use of this medicine, ask your doctor or pharmacist.

4. Possible side effects

Like all medicines, this medicine can cause side effects too, although not everybody gets them.

STOP using Ethosuximide neuraxpharm and seek medical attention immediately if you notice any of the following symptoms:
- Reddish patches on the trunk, the patches are target-like macules or circular, often with central blisters, skin peeling, ulcers of mouth, throat, nose, genitals and eyes. These serious skin rashes can be preceded by fever and flu-like symptoms (Stevens-Johnson syndrome).
- Widespread rash, high body temperature and enlarged lymph nodes (drug reaction with eosinophilia and systemic symptoms (DRESS)).

Seek medical attention if you notice any of the following symptoms:
- Changes in your blood (bruising or bleeding more easily, fever, sore throat, mouth ulcers, fatigue, repeated infections or infections that will not go away). Your doctor may take regular blood samples to test for these effects.

Other possible side effects

Common (may affect up to 1 in 10 patients) to very common (may affect more than 1 in 10 patients):
- Nausea, vomiting, hiccup and abdominal pain

Uncommon (may affect up to 1 in 100 patients):
- Severe headache, sleep disturbances, lethargy (lack of drive, apathy), ataxia (movement disorders)
- Withdrawal, anxiety
- Loss of appetite, loss of weight
- Diarrhoea, constipation

Rare (may affect up to 1 in 1000 patients):
- Paranoid and hallucinatory phenomena developing over days and weeks (illusion, persecution complex)
- Lupus erythematodes* of varying extent (skin disease that may involve internal organs)
- Leucopenia* (shortage of white blood cells), eosinophilia* (increase of a certain type of white blood cells), thrombocytopenia* (shortage of blood platelets) or agranulocytosis* (absence of certain defensive cells)

Not known (frequency cannot be estimated from the available data):
- In individual cases dyskinesias (movement disorders, see section 2) may occur during the first 12 hours of the treatment.
- Allergic skin reactions* such as rash
- In individual cases aplastic anaemia* (shortage of red blood cells due to failure of body to produce new cells) and pancytopenia* (shortage of all blood cells) may occur (see section 2).

* Side effects which are independent of the dose of the medicine

If side effects occur which are independent of the dose taken, the medicine is usually discontinued and the side effects disappear. They may reappear when Ethosuximide neuraxpharm is taken again.

Note:
Long-term treatment may affect the patient's performance, e.g. the performance in school of children and adolescents.

Reporting of side effects
If you get any side effects, talk to your doctor, pharmacist or nurse. This includes any possible side effects not listed in this leaflet. You can also report side effects directly via the Yellow Card Scheme at www.mhra.gov.uk/yellowcard, or search for MHRA Yellow Card in the Google Play or Apple App Store.
By reporting side effects, you can help provide more information on the safety of this medicine.

5. How to store Ethosuximide neuraxpharm oral solution

Keep this medicine out of the sight and reach of children.

Do not use this medicine after the expiry date which is stated on the label and the carton after "EXP". The expiry date refers to the last day of that month.

This medicine does not require any special storage conditions.
After first opening, use within 3 months.

Do not throw away any medicines via wastewater or household waste. Ask your pharmacist how to throw away medicines you no longer use. These measures will help protect the environment.

6. Contents of the pack and other information

What Ethosuximide neuraxpharm oral solution contains
The active substance is ethosuximide.
1 ml oral solution contains 50 mg ethosuximide.

The other ingredients are: cream caramel flavour (contains propylene glycol (E1520) and vanillin), citric acid monohydrate, hypromellose, macrogol 300, methyl 4-hydroxybenzoate (E218), saccharin sodium, sodium citrate dihydrate, purified water.

What Ethosuximide neuraxpharm oral solution looks like and contents of the pack
Ethosuximide neuraxpharm oral solution is a clear, colourless to slightly yellow oral solution.

Brown glass bottle with screw cap.
Packs with 125 ml, 200 ml or 250 ml (2 x 125 ml) oral solution in a carton containing also a 10 ml graduated oral syringe, graduated in 0.5 ml steps, and an adapter for the oral syringe.

Not all pack sizes may be marketed.

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