NHS
Great Ormond Street Hospital for Children
NHS Foundation Trust

Mercaptopurine: Information for families

This information sheet from Great Ormond Street Hospital (GOSH) describes how this medicine is given and some of its possible side effects. Each person reacts differently to medicines so your child will not necessarily experience every side effect mentioned. If you have any questions or concerns, please ask your doctor, nurse or pharmacist or telephone one of the contact numbers of this information sheet.

What is it for?

Mercaptopurine is a medicine used to treat certain types of cancer and leukaemia.

How is it given?

Mercaptopurine is given by mouth in tablet or liquid form, once a day. It should be given at a regular time each day, for example, always in the mornings or always in the evenings. Mercaptopurine can be given on an empty stomach or with food. The absorption of the medicine is **not** affected by food, milk, or dairy products. It is important to give the medicine in the same way on a daily basis.

*Please note: the manufacturer's leaflet may include previous advice to avoid milk and dairy products one hour before and after the dose.

What are the side-effects?

Bone marrow suppression

There will be a temporary reduction in how well your child's bone marrow works. This means your child may become anaemic (reduced red blood cells), bruise or bleed more easily than usual, and have a higher risk of infection.

Your child's blood counts will be checked regularly to see how the bone marrow is working. Please tell your doctor if your child seems unusually tired, has bruising or bleeding, or any signs of infection, especially a high temperature.
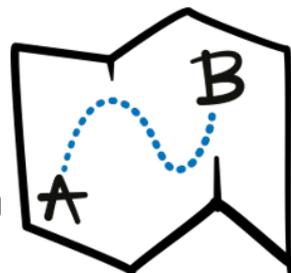
Temporary effect on liver function

Mercaptopurine can sometimes cause some changes to your child's liver function. This should return to normal when the treatment is finished. Blood tests (LFTs) will be taken to monitor your child's liver function. Please contact your doctor immediately if your child complains of pain in their right side or the whites of their eyes or their skin develops a yellow tinge.

Itchy red rash

Please tell your doctor or nurse if your child develops a rash. They will advise you on the appropriate treatment to use. This often happens when the mercaptopurine is stopped. It is temporary and will improve in time.

Nausea and vomiting

Anti-sickness medicines can be given to reduce or prevent these symptoms. Please tell your doctor or nurse if your child's sickness is very bad or continues for more than a few days.

Mouth sores and ulcers

Your child may get painful or bleeding gums, ulcers or a sore mouth. You will be given advice about appropriate mouth care including a copy of our leaflet. If your child complains of having a sore mouth, please tell your doctor or nurse.

Reduced blood sugars

After a dose of mercaptopurine, your child might have low blood sugar known as hypoglycaemia. Speak to a pharmacist or nurse if you notice your child is sleepy or tired after mercaptopurine. It may help to give a sweet sugary drink or banana after administration of mercaptopurine.

If you are concerned about any of these side effects, please discuss them with your doctor or pharmacist.

Giving mercaptopurine at home

If your child cannot swallow tablets, you can ask the pharmacist for the liquid preparation.

Accidental spillages

- If the liquid gets onto your skin, you must wash the area immediately, using plenty of water. If the skin is sore, you should contact your GP (family doctor) for advice.

- If the liquid accidentally gets into your eyes, wash with plenty of running water for at least 10 minutes. If your eyes are sore after this, you should go to your nearest Accident and Emergency (A&E) department.

- If the mixture is spilt on clothing, the spill should be blotted dry with kitchen paper. Clothing should be removed immediately and washed separately from other items. Used kitchen paper should be disposed of as above.

- If you accidentally spill the tablets or liquid on the work surface or floor, wearing gloves, cover the spillage with kitchen paper. Wipe the area with water then clean with household cleaner and water.

- Used paper towels, masks, vomit and dirty disposable nappies should be placed inside two rubbish bags and disposed of along with your normal rubbish.

If any type of spillage occurs, you should contact GOSH for advice immediately.
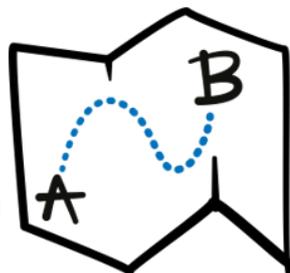
Mercaptopurine and other medications

Some medicines can interact with mercaptopurine.

Always check with your doctor or pharmacist before giving your child any other medicines, including herbal or complementary medicines.

Important

- Keep medicines in a safe place where children cannot reach them.
- Keep medicines in a cool, dry place out of direct sunlight and away from heat.
- You should handle these medicines with care, avoiding touching them where possible. If you are pregnant or think you could be pregnant, please discuss handling with your doctor, nurse or pharmacist. Please see our Special handling requirements information sheet for further details.
- If your child is taking mercaptopurine liquid, it can only be used for eight weeks once opened. Write the date you opened the bottle on the label to remind you.
- Sometimes it is necessary to halve tablets to get the correct dose. A tablet cutter may be used for this, but you should keep it only for cutting chemotherapy tablets.
- If your doctor decides to stop treatment with mercaptopurine or the medicine passes its

expiry date, return any remaining medicine to your pharmacist. Do not flush down the toilet or throw it away.

- If you forget to give your child a dose, give it as soon as you remember. Do not give a double dose if it is already time to give the next one. Inform your doctor or nurse and keep to your child's regular dose schedule.
- Sometimes, a blood test called TGN is carried out to check whether your child is receiving enough mercaptopurine. You will be advised by the medical team if this is due.

- If your child vomits after taking the dose, inform the doctor or nurse. Do not give them another dose.
- Your family doctor (GP) will need to give you a repeat prescription for mercaptopurine.
- Some medicines will need to be ordered by your local pharmacist- ask your GP for another prescription with enough time (when you have about 2 weeks of your medicine left) to ensure you do not run out.

For further information please contact:

Medicines Information: 020 7829 8608 or via the Medications page on the MyGOSH app (available Monday – Friday, 9am - 5pm excluding Bank Holidays)

GOSH switchboard: 020 7405 9200 or contact your clinical team directly via the MyGOSH app

Disclaimer

Please read this information sheet from GOSH alongside the patient information leaflet (PIL) provided by the manufacturer. If you do not have a copy of the manufacturer's patient information leaflet please talk to your pharmacist. A few products do not have a marketing authorisation (licence) as a medicine and therefore there is no PIL.

For children in particular, there may be conflicts of information between the manufacturer's patient information leaflet (PIL) and guidance provided by GOSH and other healthcare providers. For example, some manufacturers may recommend, in the patient information leaflet, that a medicine is not given to children aged under 12 years. In most cases, this is because the manufacturer will recruit adults to clinical trials in the first instance and therefore the initial marketing authorisation (licence) only covers adults and older children.

For new medicines, the manufacturer then has to recruit children and newborns into trials (unless the medicine is not going to be used in children and newborns) and subsequently amend the PIL with the approved information. Older medicines may have been used effectively for many years in children without problems but the manufacturer has not been required to collect data and amend the licence. This does not mean that it is unsafe for children and young people to be prescribed such a medicine 'off-licence/off-label'. However, if you are concerned about any conflicts of information, please discuss with your doctor, nurse or pharmacist.