

Propranolol Information sheet

What is an infantile haemangioma ?

An infantile haemangioma is a common type of birthmark. Haemangiomas are benign collections of extra blood vessels in the skin and are one of the most common skin problems of the first year of life. They appear most frequently during the first one to four weeks after birth and occur in about 5% of all children. After appearing, haemangiomas grow fast for the first few weeks or months of life. A haemangioma is a tumour, but it is not cancer. It is benign. The cells of a haemangioma multiply at a rate that is faster than normal. By around 8 months, these cells stop multiplying and most haemangiomas stop growing. They begin to shrink around 1 year of age and slowly improve over time on their own, and this often takes many years. Larger ones will take longer to go away and have a higher chance of scarring. Each haemangioma is unique. Even in the same baby, one haemangioma may not grow and another may become quite large. About one in four haemangiomas will need some form of treatment.

When is propranolol used to treat a haemangioma ?

A small number of haemangiomas require treatment for complications caused by growth of the haemangioma. Sometimes treatment is needed if the haemangioma is growing too large on the eye, lip and nose or in the airway. Treatment is also needed if there is a real risk of permanent scarring. Sometimes propranolol is used to help with healing when skin breakdown occurs on the haemangioma. During the first couple of months of life when a haemangioma is growing rapidly it can be difficult to determine how big it will become, so your child may need to be seen often; as babies get older the visits are usually less frequent.

What is propranolol?

Propranolol is a medicine that has been used for many years to treat high blood pressure and an irregular heart rate. Propranolol is also used to treat migraine headaches. Recently propranolol has been shown to shrink haemangiomas in some infants. Propranolol is approved by regulatory authorities but not specifically for treating haemangiomas.

What are the possible risks or side effects of propranolol?

Allergic reaction

As with any medicine, people can be allergic to propranolol, although this is very rare. Mild allergic reactions can include itching, hives or swelling of the face or hands. More severe allergic reactions include swelling or tingling of the mouth or throat, chest tightness or trouble breathing. You should stop your child's medicine and seek medical help if you suspect an allergic reaction.

Slow heart rate

Propranolol can make the heart rate slower, but most of the time the heart rate in infants taking propranolol for haemangiomas is still in the normal range. You can be taught how to take your child's heart rate and how many beats per minute is normal for your child's age group.

Low blood sugar

Propranolol can lead to low blood sugar. Low blood sugar can cause drowsiness or rarely seizures. Early signs of low blood sugar may include coldness, shakiness and sweating. Low blood sugar with propranolol is more likely to occur when your child is not eating normal amounts or has gone for several hours with eating. To help prevent this, always give propranolol during or right after your child has eaten. Other instructions to prevent low blood sugar are listed below under “ Important information when giving your infant propranolol”

Breathing problems or wheezing

Propranolol can worsen asthma or wheezing. Wheezing is frequently associated with colds or flu-like illnesses. Sometimes your child will be treated for wheezing with an inhaled medicine (one that is breathed in). If your child is wheezing, immediately contact your doctor. Propranolol may be withheld during these types of illnesses.

Change in sleep pattern.

Propranolol can affect some children’s mood or sleep pattern. These effects are usually noticed when your child first begins taking propranolol, and may include difficulty getting to sleep or sleeping more than normal. Less often nightmares have been reported. If you notice them and they are mild in your judgement, see if they decrease once your child has been taking propranolol for longer than a few weeks. Usually sleep disturbance does not occur unless propranolol is given at the evening feed.

Other possible side effects

Propranolol can much more rarely cause other side effects. If your child has a new problems or change in behaviour, contact the doctor prescribing the propranolol to see if it might be related.

What can you do to reduce the chances of a side effect during treatment with propranolol ?

If used properly, propranolol is a safe and effective medication for treatment of infantile haemangiomas. The following steps will help you to use the drug safely:

- propranolol will be prescribed in a liquid form and should be measured carefully . It is important to give the correct amount (based on your child’s weight) at the correct time.
- Give every dose of propranolol with a feed (milk or solids) but do not mix with a feed
- Always use a syringe to measure the medicine. This can be obtained from your pharmacist
- Measure each dose of medicine carefully
- Doses should always be at least 6 hours apart
- If you miss a dose, never try to make up for missed doses by giving an extra dose or doubling the dose. Simply wait for the next time the dose is due and give it then

- If your child spits up a dose or if you are uncertain whether they swallowed all of the medicine do not give another dose, just wait until the next scheduled dose
- Feed your child frequently (at least 6 hourly for infants).
- If your child is sick and will only drink small amounts, stop giving propranolol and contact your doctor. You can stop the propranolol for a few days to give your child's body a chance to build up stores of sugar again after an illness
- If your child needs to stop eating for a test or procedure be sure to let doctors know that your child is taking propranolol. Propranolol may need to be stopped before a procedure.
- Check all medications that your child is taking with your doctor or pharmacist. Propranolol may interact with other drugs. This includes "over the counter" and herbal medicines.

What should you do if you notice any side effects that you think could be caused by propranolol?

Call 000 if your child develops trouble breathing, is unresponsive or has a seizure. If you think your baby has low blood sugar give him or her a source of sugar. However do not give anything to your baby by mouth if he/she is unresponsive.

Contact or see your child's doctor right away if you notice any of these side effects

- allergic reaction: itching or hives, swelling in the face or hands, swelling or tingling in the mouth or throat, chest tightness.
- Trouble awakening or losing consciousness
- Cold sweats and /or bluish coloured skin
- Slow, fast or uneven heart rate
- Unusual tiredness or weakness

If you notice these less serious side effects, contact the prescribing doctor to discuss:

- constipation, diarrhoea, nausea or vomiting, or upset stomach
- mood change
- trouble sleeping
- skin rash