



Propranolol Treatment for Hemangiomas

Propranolol is a medicine that is used to treat some types of hemangiomas.

What is propranolol?

Propranolol is a medicine used to safely lower blood pressure and heart rate in adults and children. It has also been shown that Propranolol can shrink hemangiomas in some patients.

When can propranolol be used?

Not all hemangiomas need to be treated with a medicine like propranolol. Propranolol may be used if your baby has hemangiomas that are:

- Bleeding or have sores (ulcers)
- At risk for bleeding
- Very large
- In the airway and make it hard to breathe
- Affecting how your baby nurses or sucks on a nipple
- On the face or likely to leave a scar if untreated
- Near the eye and affecting vision
- Inside the body, such as on the liver

How long will my baby need treatment?

Your baby may need to take propranolol for 6 months or more. Propranolol works best when treatment covers the entire growth phase of the hemangioma, usually through 12 months of life. One of our providers will meet with you regularly during treatment to ensure the medicine is working for your baby. Near the end of treatment, we will slowly lower the amount of medicine your baby is taking until they completely stop. Then we will watch to see if the hemangioma begins to return. If it returns, we may extend treatment for a few more months.

It is important that your baby have regular visits with their care provider. The amount of Propranolol that your baby gets is based on their weight. As your baby grows they will need a larger amount.

How do we start treatment?

Propranolol is a liquid medicine taken by mouth – 3 times a day, or about every 8 hours. For most babies the first dose of propranolol is given in clinic. We will monitor your baby's heart rate and blood pressure once an hour for the first 3 hours. This is to be sure that your baby's heart rate and blood pressure stay within the normal range for their age.

At this appointment, we will teach you:

- How to give your baby the propranolol
- How to check your baby's heart rate
- About the possible side effects and what to watch out for

Because Propranolol can have effects on heart rate and blood pressure, some babies will need an exam by a heart doctor (cardiologist) before starting treatment. This appointment may include:

- **Blood pressure and heart rate check:** We will check your baby's blood pressure using a blood pressure cuff and their heart rate with a stethoscope.
- **Electrocardiogram (ECG or EKG):** This test records your baby's heart beats to test the electrical pathways of the heart. Small sensors (stickers) are placed on the baby's skin. ECGs generally do not cause discomfort.
- **Echocardiogram (ECHO):** This test uses sound waves to create pictures of the heart structures. This includes the heart's valves and chambers. To do this, a probe, called a transducer, is passed over the chest skin. ECHOs generally do not cause discomfort.

What are the possible side effects of treatment?

Lowered heart rate and blood pressure

This is the most common side effect of propranolol. It is most noticeable when your child first starts the medicine and when their dose is increased. At each appointment, we will check your child's blood pressure and heart rate.

Low blood sugar (hypoglycemia)

Low blood sugar is an uncommon side effect. It is uncommon because babies this age eat so often. It is more likely to happen if your child is sick, has lost their appetite or has not eaten for a long time because of a procedure. You can prevent this by giving your child Pedialyte. Young children and infants may become irritable, jittery or act hungry (crying) when they have low blood sugar. If you notice this in your sick child, stop the propranolol, give your child Pedialyte and seek immediate medical assistance.

Sleepiness and cold hands and feet

These are common side effects when your child first starts the medicine. They usually go away after the first week.

Coughing or wheezing

Coughing or wheezing are rare side effects with propranolol. At each appointment, we will ask you if you notice your child doing this. If your child has cough or wheeze with propranolol, we may reduce or stop the propranolol dose.

To Learn More

- Vascular Anomalies Clinic 206-987-4606
- Ask your child's healthcare provider
- www.seattlechildrens.org

Free Interpreter Services

- In the hospital, ask your child's nurse.
- From outside the hospital, call the toll-free Family Interpreting Line 1-866-583-1527. Tell the interpreter the name or extension you need.

Can propranolol be taken with other medicines?

It is OK to take propranolol with:

- Ibuprofen (Advil or Motrin)
- Acetaminophen (Tylenol)
- Vitamin D
- Gripe Water
- Antibiotics
- Vaccines

It is **not** ok to take propranolol with a beta2-agonist, like albuterol. If your baby needs albuterol, temporarily stop the propranolol. You can restart it when your baby no longer needs albuterol. If you are unsure about a medicine that is not listed, contact us.

How do I contact the Vascular Anomalies Clinic?

To contact the clinic, call 206-987-4606. Choose option 1 to schedule or change appointments or option 4 to speak with a nurse.