

Propranolol for Hemangiomas

Propranolol is a medicine given by mouth to treat hemangiomas in infants. A hemangioma is a collection of blood vessels. Most of them are harmless. However, some are large, have open areas (sores), or affect certain body parts, like the eyes, nose, or mouth, as they grow.

Propranolol is used to shrink or stop hemangiomas from growing. It may also help heal sores. This medicine is given by mouth as a liquid. It's usually given until your baby is 12 to 15 months old to get the best results and keep the hemangioma from growing back.

Warnings

- Your baby should **not** take propranolol if they're allergic to it.
- Tell the doctor or health care provider if your baby has asthma or had asthma in the past. Propranolol can cause more wheezing or asthma attacks, making it harder to breathe.

Starting Propranolol

Outpatient Clinic

An outpatient clinic appointment will be scheduled to give the first dose of propranolol. The appointment will take 1 to 2 hours.

Tell the doctor or health care provider if your baby is sick with these symptoms: vomiting, diarrhea, loss of appetite, or wheezing. If they're sick, the appointment may be rescheduled.

What to expect during this visit:

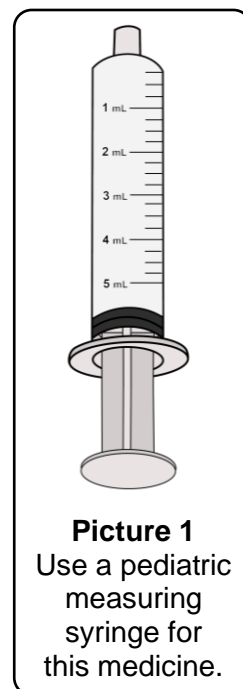
- The propranolol prescription will be sent to your pharmacy or the hospital pharmacy. Bring the medicine with you for the first dose in the clinic.
- Your baby's vital signs will be watched before and after the first dose of propranolol.
- Bring a meal to the appointment for your baby. This will help prevent low blood sugar.
- A follow-up visit will be scheduled with your baby's doctor or health care provider.

Hospital

- Your baby will start propranolol in the hospital if they're:
 - 5 weeks old or younger and full term (37 weeks or more).
 - 5 weeks old or younger (corrected gestational age) for preterm infants (younger than 37 weeks).
- During treatment, your baby:
 - Will be watched closely for 48 to 72 hours.
 - Will be checked on (assessed) by the doctor or health care provider, and their blood sugar and blood pressure will be checked often.
 - Will have an electrocardiogram (EKG) done to make sure their heart is working well before starting this medicine.

How to Give This Medicine

- Your baby's dose of propranolol will be based on their weight and how they respond to treatment.
- Read the label carefully in a well-lit area each time before giving this medicine.
- Always give the **exact dose** prescribed. Do not give more or less than the ordered dose.
- Use a pediatric medicine syringe to measure the exact dose (Picture 1). These are at most pharmacies and the Nationwide Children's Hospital pharmacy. **Do not use kitchen spoons to measure liquid medicines.**
- Stay with your baby until they've swallowed all the medicine.
- Give this medicine with food to prevent low blood sugar.
- Your baby will take propranolol 2 times each day with meals. There should be at least 9 hours between each dose.



If You Forget a Dose

If you forget to give a dose of this medicine, give it as soon as you remember. If it's less than 6 hours until the next dose, do not give the missed dose at all. Do not double the next dose. Go back to your regular dosing schedule. If you have any questions, check with your baby's doctor, health care provider, or pharmacist.

If a Dose Is Vomited

If the medicine is vomited right after giving it, **DO NOT** give another dose. Wait until their next scheduled dose. If the vomiting continues, call their doctor or health care provider.

Possible Side Effects

- Possible minor side effects include:
 - Sleep disturbance
 - Wheezing, coughing, or breathing problems
 - Cool hands and feet
 - Stomach problems like diarrhea or constipation
- Serious side effects are rare. These include:
 - Slow heart rate
 - Low blood sugar
 - Low blood pressure
 - Sleepiness or drowsiness

When to Call the Doctor

Call your baby's doctor or health care provider if:

- They're not eating (fasting) before surgery or for other reasons (religious, spiritual).
- They're not able to eat or are not eating as much as usual.
- They're vomiting.
- They're more tired than normal, inactive, or don't have much energy.
- Their skin feels cool to the touch.
- They're wheezing or having trouble breathing.

When to Call 911

Call 911 for emergency help if your baby:

- Has any of these signs of an allergic reaction:
 - Trouble breathing, wheezing, or tightness in the chest
 - Swelling of the tongue, mouth, or throat
 - Itching, hives, or swelling of the hands, feet, or ankles
- Has symptoms of low blood sugar:
 - Very tired or inactive
 - Will not wake up or respond
 - Is shaking or having seizure-like activity

Medicine Storage

- Store all medicine out of the reach of children and pets.
- If you carry medicine in your purse, keep it in its childproof bottle. Keep your purse out of the reach of children and pets.
- Always keep medicine in the original bottle from the pharmacy.
- Store this medicine in a cool, dry place with the lid on tightly.
- Do not store this medicine in a bathroom or above a kitchen sink.
- Keep the liquid form of this medicine at room temperature or in the refrigerator. It may taste better if kept refrigerated. Do not freeze.
- Do not use this medicine after the expiration date printed on the bottle.

Drug and Nutrient Interactions

- Tell your baby's doctor, health care provider, or pharmacist if they take heart or blood pressure medicine, medicine for asthma or wheezing, or medicine that affects blood sugar.
- Tell your baby's doctor or health care provider and pharmacist about all prescriptions and over-the-counter medicines, herbal supplements, or vitamins they take.

Medicine Safety

- **Some pharmacies do not have this medicine.** Call your pharmacy to see if they have or can get this medicine. You may also fill the prescription at Nationwide Children's Hospital Outpatient Pharmacy. A nurse can help you with this.
- This medicine is prescribed for your baby **ONLY**. **Do not give it to anyone else.**
- Get this medicine refilled at least 5 days before giving the last dose. This is very important.
- Keep a record of when the medicine is given.
- Learn the name, spelling, and dose of this medicine.
- Tell anyone caring for your baby that they're taking this medicine and what side effects to watch for.
- Tell your baby's doctor or health care provider and pharmacist if they have a strange or allergic reaction to any medicine.
- Bring all your baby's medicines with you in the original bottles whenever they see a doctor or health care provider, go to an emergency room, or are admitted to the hospital.

- Always keep a current list of your baby's medicines with you. It should include prescriptions, over-the-counter medicines, vitamins, herbal and natural products, and supplements.
- **If your baby takes too much of this medicine, or if someone else takes this medicine, call the Central Ohio Poison Center** at 1(800) 222-1222 [TTY (614) 228-2272]. They will tell you what to do.
- Ask your pharmacist for 2 labeled bottles if your baby's daycare will be giving this medicine.
- When the medicine is no longer needed, **do not flush it down a toilet or pour it down a drain**. Mix leftover medicine with an unwanted material, like coffee grounds. Put the mixture back in the bottle or in another container that will not leak. Throw the container away in the trash where children and pets cannot reach it.