



**NATIONWIDE CHILDREN'S**  
*When your child needs a hospital, everything matters.™*

**Helping Hand™**

*Health Education for Patients and Families*

## Propranolol for Hemangiomas

Propranolol (pro PRAN oh lol) has been used for many years by cardiologists (heart doctors) to treat heart problems and high blood pressure. It is now also used by dermatologists and plastic surgeons to treat hemangiomas. A hemangioma (hem AN gee OH muh) is a blood-vessel birthmark. (See Helping Hand HH-I-310, *Hemangioma*.)

Many hemangiomas do not cause problems; they often go away with time. Some are very large, have open sores, or can affect certain body parts as they grow (like the eyes, nose or mouth). Propranolol may lighten or shrink the hemangioma. It may also help to heal open areas and stop the growth of hemangiomas that cause other problems.

An electrocardiogram (EKG) is done to check how the heart is working before giving this medicine. Children older than 3 months are often started on propranolol while in the clinic.

### Starting propranolol in infants

If your child is 3 months old or younger (corrected age if premature), this medicine will be started in the hospital. Your baby will be watched closely after taking it. We will also check their blood sugar and blood pressure on the medicine. Your baby will be in the hospital for 48 to 72 hours.

### During your child's admission, you can expect:

- to answer questions about your baby's health;
- a physical by the doctor to make sure this medicine is safe for your baby;
- an EKG to check how your child's heart is working before giving the medicine (See Helping Hand HH-III-6, *EKG (Electrocardiogram)*);

For a child with a large hemangioma on their face, more evaluation is needed. Your child's provider will tell you if they feel that your child needs this. Further evaluation may include:

- Cardiology (heart) team assessment;
- an MRI/MRA of the brain and neck;
- ophthalmology (eye doctor) assessment.

While your baby is in the hospital, these things will be available to you both:

- formula;
- standard bottles and nipples for feeding (if your baby uses a specific type or brand, we suggest you bring that);
- breast pump and tubing for breastfeeding mothers;
- privacy for mothers to breastfeed baby;
- storage for breast milk;
- diapers and wipes for baby;
- rockers or swings for baby;
- standard crib for baby to sleep;
- couch that converts to a bed for parent or guardian to spend the night with the baby;
- your own in-room shower;
- television;
- main toiletries, like toothbrush and toothpaste;
- any medicines taken at home by your child, such as vitamins.

Please bring your child's medicines with you to confirm the exact medicine and dose. The hospital will provide your baby's medicine during your stay.

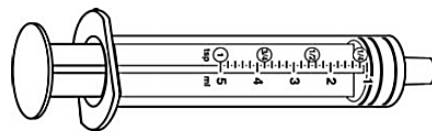
**On the day of admission:**

- You may park in the BLUE visitor garage. The address for this garage is 633 Children's Dr., Columbus, OH 43215.

- Once you enter the hospital, you will go to Admitting next to the main gift shop. Someone from Admitting will direct you to the floor where your child will start their propranolol therapy.

## How to give this medicine at home

- Your child's dose of propranolol is chosen carefully. It is adjusted for your child's weight and response to treatment.
- Always give the exact amount prescribed. Never increase or decrease the dose.
- Read the label carefully. Make sure you are giving your child the right dose. It is easy to confuse the many different dosage forms and strengths.
- Use a pediatric measuring syringe (Picture 1) to measure the exact dose. These are available at the pharmacy. Do not use kitchen spoons to measure liquid medicines.
- Stay with your child until he or she has swallowed the dose of medicine.
- **Give this medicine with food.** In order to prevent low blood sugar, it is important to give each dose with a meal. Food, formula, or breast milk should be given immediately before or along with the dose of medicine.
- Give the propranolol as closely as possible to the prescribed time. It may be prescribed to be given every 8 hours or every 12 hours. The medicine label will tell you how often to give it. To give this medicine at the right times and give the propranolol with food, pick times that work well with your child's sleeping and feeding schedule. It is okay to give the medicine up to 60 minutes early or 60 minutes later than the usual scheduled dose.
- It is helpful to give one or two adults in the household the role of giving this medicine. For safety, only people who normally care for your child should give propranolol.
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**Picture 1** Use a pediatric measuring syringe for this medicine.

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## Possible side effects

Because of the risk for side effects, children less than 3 months old are often started on this medicine in the hospital. If this is necessary, your child's doctor will discuss it with you further. Most patients do well on this medicine and do not have problems. Serious side effects are rare but could occur.

**Low blood sugar.** Your child will **not** be able to tell you if they are experiencing low blood sugar. Common signs of low blood sugar may include:

- Irritability
- Restlessness
- Very tired or inactive

A child with **severe low blood sugar** could have seizures or not be able to be awakened. **If this happens, call 911.**

**Slower heart rate and lower blood pressure.** The dose of propranolol that is prescribed for treating hemangiomas is low and usually does not cause serious low heart rate or low blood pressure. The child's heart rate and blood pressure are checked at every visit to make sure this is not happening.

**Worsening of asthma or wheezing.** Propranolol should not be given to children with a history of asthma. Propranolol may increase the chance of wheezing. If your child were to start wheezing while on propranolol, the medicine would need to be stopped, but call your child's doctor first. Do not abruptly stop propranolol.

**Other medicines.** Propranolol may not work well with other medicines. Check with your child's doctor and pharmacist before adding any new medicines.

## **What to do about side effects**

Call your child's doctor if any side effects continue or are very bothersome.

If your child develops wheezing while on propranolol, let their doctor know so it may be stopped. Once your child is healthy, you may restart the propranolol.

## **When not to give this medicine**

There are certain times when propranolol **should not be given**. At these times, it is okay to skip a dose or stop the propranolol until the reason is fixed.

Do not give propranolol if your child is:

- fasting (not eating) before surgery or for any other reason;
- unable to eat or is eating much less than usual;
- vomiting; unusually tired or inactive or has poor energy;
- has skin that feels cool to the touch;
- wheezing or having trouble breathing.

## **Medicine storage**

- Store all medicine out of the reach of children.
- Do not keep this medicine in the refrigerator. Store at room temperature.

- Always keep medicine in the original bottle from the pharmacy.
- Keep this medicine away from heat or direct sunlight.
- Do not use this medicine after the expiration date printed on the container.

## **When to call for emergency help**

Call for emergency help if your child has any of these signs. It could be an allergic reaction if your child:

- has trouble breathing
- is not responsive
- has seizure-like activity after taking this medicine

## **Medicine safety**

- Ask your pharmacist for two labeled bottles if your daycare provider will be giving this medicine.
- Refill the prescription at least \_\_\_\_\_ days before the last dose is given. This is very important.
- Tell your child's doctor and pharmacist if your child has a strange or allergic reaction to any medicine.
- Bring all your child's medicines with you in the original bottles whenever your child sees a doctor, goes to an emergency room, or is admitted to the hospital.
- Learn the name, spelling, and dose of this medicine. Also, teach your child if he is old enough.
- If your child 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.
- If you have any questions, be sure to ask your doctor, nurse, or pharmacist.
- When your child's doctor decides this medicine is no longer needed, discard the medicine in the correct way. Dissolve it in water or rubbing alcohol and mix it in used coffee grounds or kitty litter. Throw this mixture in the trash where children and pets cannot reach it.