

INFORMATION FOR FAMILIES: WHAT ARE HEMANGIOMAS?

Hemangiomas are groups of extra blood vessels in the skin. They are not cancerous and usually appear during the first weeks of life.

Superficial hemangiomas are bright red and bumpy. They are often called strawberry marks because they look like the surface of a strawberry. Deep hemangiomas occur under the skin and have a bluish color. Some hemangiomas have superficial and deep parts. Hemangiomas that are present at birth are different; these are called congenital hemangiomas.

What to Expect

Hemangiomas usually grow in the first 2 to 3 months of life. Most growth is complete by 6 months of age. Deep hemangiomas can sometimes grow for a longer time. At between 6 and 18 months of age, most hemangiomas begin to improve. The hemangioma will be less red and will take on a gray color. It will also get softer and flatter. Improvement in the hemangioma often takes many years. Most improvement happens by age 4 years, but sometimes, it takes longer.

Possible Complications

Most hemangiomas cause no problems and can be left to go away on their own. Parents often worry about hemangiomas bleeding. This is rare and only happens if the skin has broken down (ulcerated). The bleeding usually lasts a short time and stops with gentle pressure.

Hemangiomas usually do not cause pain unless the skin has broken down.

Hemangiomas can cause permanent changes in the skin's texture or color or leave lumpiness even after the hemangioma has gone away. This can be worrisome, especially for hemangiomas on the face. In rare cases, hemangioma may affect eating, eyesight, hearing, or breathing.

Does a Hemangioma Need to Be Treated?

Whether a hemangioma needs treatment depends on the age of the patient, where the hemangioma is located, how fast it is growing, and whether it might cause problems. There are 3 main reasons for treatment:

1. a medical problem caused by the hemangioma;
2. a breakdown of the hemangioma skin that may cause skin damage or scarring; and
3. concern about permanent skin changes.

Possible Treatments

Local Treatments

β -blocker, a medication, like timolol solution, is applied to the hemangioma. This can help stop the hemangioma from growing. Sometimes it can shrink and fade a hemangioma, especially if the hemangioma is not thick.

With steroid injection, a steroid can be injected into the hemangioma. This works best for hemangiomas that are localized and are becoming thick.

Oral Treatments

Propranolol is a medicine taken by mouth that is used to treat hemangiomas. It has been used for many years to treat high blood pressure. Oral steroids sometimes are used, but propranolol is more effective.

Other Treatments

Lasers may be helpful to remove some of the redness after hemangiomas have begun to go away or have finished their improvement phase.

Surgery sometimes is performed if oral treatments fail. Surgery also can be performed to repair leftover extra skin or scarring. Because surgery leaves a scar (and because most hemangiomas get better with time), early surgery usually is not needed. Surgery is sometimes performed if the skin of the hemangioma breaks down.

For more information, visit www.hemangiomaeducation.org (sponsored by the Hemangioma Investigator Group).

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INFORMATION FOR FAMILIES: PROPRANOLOL FOR HEMANGIOMAS

Hemangiomas are groups of extra blood vessels in the skin. They usually appear during the first weeks of life. Hemangiomas may grow in the first 2 to 3 months of life. At between 6 and 18 months of age, most hemangiomas begin to improve.

When Do Hemangiomas Need to Be Treated?

Most hemangiomas cause no problem and may be left to improve on their own. Whether a hemangioma needs treatment depends on the age of the patient, where the hemangioma is located, how fast it is growing, and whether it might cause problems. There are 3 main reasons for treatment:

- a medical problem caused by the hemangioma;
- a breakdown of the hemangioma skin that may cause skin damage or scarring; and
- concern about permanent skin changes.

What Is Propranolol and How Does It Work?

Propranolol is a β -blocker. It has been used for many years to treat problems such as high blood pressure and irregular heartbeat. Propranolol also may make hemangiomas better. It makes them softer and less red. It also can make them smaller. Propranolol works quickly. Improvement may be seen in the first few days to weeks on the medication.

Are Any Tests Needed Before Starting Propranolol?

Most infants require no testing. Occasionally, your doctor may order an electrocardiogram. You should speak with your doctor about what testing may be needed for your child.

What Are the Possible Side Effects of Propranolol?

Propranolol can have side effects, but they are uncommon. Possible side effects include:

- Slow heart rate and low blood pressure are rare side effects. Most infants taking propranolol have a normal heart rate and blood pressure. Some have changes so mild that they cause no problem.
- Low blood sugar is a rare side effect, but it may be a serious one. Low blood sugar can cause infants to be weak, fussy, shaky, or nervous. Rarely, it can cause a seizure. Low blood sugar usually happens if an infant is not feeding well or has gone a long time without feeding. To help prevent this, propranolol should always be given just before or just after a feeding. If your infant is not feeding well, propranolol should be stopped until feeding returns to normal.
- Breathing trouble (wheezing or cough) usually happens when an infant has a cold. To be safe, it is best to stop propranolol until the cold improves.
- Changes in sleep: some infants have trouble falling asleep, sleep more than normal, or have nightmares. This usually happens during the first weeks of treatment and often improves with time.

- Other possible side effects: some infants develop cool hands and feet. Stomach problems like diarrhea or constipation rarely occur.

Notify your provider if you have questions about propranolol or concerns about your infant's health.

How Is Propranolol Taken?

Propranolol is taken by mouth, and the dose will be calculated on the basis of your child's weight. It is given 2 or 3 times per day 6 to 8 hours apart. Propranolol should always be given just before or after a feeding.

How Long Does Treatment With Propranolol Last?

The length of treatment will depend on your child's individual situation. Most infants are treated until about 12 to 15 months of age.

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