

Capillary Hemangioma

WHAT IS A CAPILLARY HEMANGIOMA?

A capillary hemangioma (“strawberry” birthmark) is a benign (non-cancerous) tumor made up of abnormal tiny blood vessels (capillaries). Capillary hemangiomas may not be present at birth but usually appear within the first 6 months of life. They usually grow fast up to the age of 12 months and then they begin to shrink in size between 12 and 15 months of age. Most go away nearly completely by 5 or 6 years of age. Capillary hemangiomas are more common in premature infants and in girls.



Fig. 1: A capillary hemangioma as shown below the eye in the photo is an abnormal overgrowth of blood vessels that is sometimes called a "strawberry" birthmark.

WHERE ON THE BODY DO CAPILLARY HEMANGIOMAS OCCUR?

Capillary hemangiomas can be found anywhere on the body. For the eye, they usually grow on eyelids, the eye surface called the conjunctiva, and the eye socket or orbit.

WHY DO CAPILLARY HEMANGIOMAS ON THE EYELIDS CAUSE VISION PROBLEMS?

Capillary Hemangiomas on the eyelid can cause problems with vision. As the hemangioma grows, it can press on the surface of the eye and change the shape of the eye, known as [astigmatism](#). Astigmatism can cause blurry or distorted vision and problems focusing ([amblyopia](#)). If the hemangioma causes the eyelid to droop ([ptosis](#)) and block vision in the eye, this can also



cause problems focusing and amblyopia. If amblyopia develops, it can be treated with glasses, patches or eye drops.

HOW DOES A CAPILLARY HEMANGIOMA IN THE EYE SOCKET CAUSE VISION PROBLEMS?

A capillary hemangioma in the eye socket (the area around the eye also called the orbit) can put pressure on the eye, change its shape and cause amblyopia as described above. A capillary hemangioma in the orbit can also cause problems with eye movement (strabismus) and can injure the optic nerve by pressing on it ([optic nerve atrophy](#)). Any of these conditions may damage vision.

DO ALL CAPILLARY HEMANGIOMAS AROUND THE EYE NEED TO BE TREATED?

No. Most capillary hemangiomas around the eye do not need treatment. They can be watched for the development of vision problems. Treatment is needed only if the hemangioma is causing a problem with vision.

HOW ARE CAPILLARY HEMANGIOMAS TREATED?

Capillary hemangiomas can be treated in different ways depending on the location of the hemangioma, how large it is, and whether or not it is causing vision problems.

MEDICATIONS

Propranolol- is a medication used for heart disease belonging to the beta blocker family of medicines. By chance, it was also found to be effective in treating hemangiomas in infants who needed the medicine to help with heart. Propranolol is now used as a first line of treatment for capillary hemangiomas. Propranolol is usually taken orally (by mouth) and is in general a safe medicine. The child's heart rate and blood pressure need to be monitored in the beginning of treatment and this may require a short stay at the hospital. Other beta blocker medications like atenolol have also been shown to be safe and helpful in treating hemangiomas. If the hemangioma is superficial (on the surface) or small, then a beta-blocker eye drop, such as



Timolol (which is also used to treat glaucoma), can be rubbed directly on the skin of the hemangioma instead of taking the medicine by mouth.

Steroids can also be used to help treat hemangiomas. Similar to beta-blocker medication, the type of steroid used depends on the size and location of the hemangioma. Steroids may be given by mouth, injected directly into the hemangioma, or applied to the skin surface of the hemangioma. Steroid medications can have side effects including poor growth of the child, cataract, glaucoma and stroke to the eye (central retinal artery occlusion).

Laser treatments can sometimes be used on hemangiomas that are thin and on the surface layer of the skin. Laser can help stop the hemangioma from growing, shrink its size, or lighten the color.

Traditional surgery to remove hemangiomas may be a good treatment for small, well-defined hemangiomas that are located just under the skin surface.

Speak with your child's ophthalmologist to see if treatment is needed and which treatment will work the best for your child's hemangioma.

HOW LONG DOES IT TAKE FOR THE CAPILLARY HEMANGIOMA TO GO AWAY?

Capillary hemangiomas take several years to fully go away. The involved skin may stay slightly red in color, may be slightly puckered in appearance or may look perfectly normal depending upon how completely the hemangioma goes away. Treatments for hemangiomas mentioned above can help them go away faster and leave less signs of a hemangioma on the skin.

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