

Retinoblastoma

Retinoblastoma (reh-tin-oh-blas-TOE-mah) is a cancer of the retina (back of the eye). This type of cancer is usually found in children younger than 3 years of age (Picture 1). It is very rare for this cancer to occur in people over 6 years of age.

Retinoblastoma is often congenital. This means it was present at birth. About 25 percent are caused by genetic mutations (changes in the normal programming of the genes). In 10 percent of newly diagnosed cases, there are other family members with retinoblastoma.

Bilateral (in both eyes) retinoblastoma is inherited, or passed on from parent to child. Most unilateral (one eye) retinoblastoma occurs by chance. Healthy parents who have one child with this disease have a small chance another child may also have it. Brothers and sisters of the affected child should have regular eye exams with an ophthalmologist (eye doctor).

Signs and symptoms

Retinoblastoma is often found when a child develops strabismus (crossed eyes) and starts to squint. By shining a light into the child's eyes the doctor may see a white reflex in the pupil. When the pupils look different in a photo (one is white and the other is red) it might be a sign of retinoblastoma.

Diagnosis

Children suspected of having this disorder are referred to an eye doctor. The eye doctor examines the eyes while the child is under general anesthesia. MRI (magnetic resonance imaging) is used to find out if there is a tumor outside the eye or in the brain.

If the doctors suspect the disease has spread to other parts of the body, a bone marrow test, bone scan and spinal tap may also be done.



Picture 1 Most retinoblastomas occur in children under 3 years of age.

Treatment

There are many different treatments for retinoblastoma. Your child's doctor chooses treatment based on the location and size of the tumor. Possible treatments include removal of the eye (enucleation), radiation therapy, chemotherapy, laser therapy or cryotherapy. Several of these treatments may be combined. The eye doctor and oncologist (cancer doctor) will decide the treatment plan.



Follow-up care

- Your child will have follow-up appointments with an oncologist and an eye doctor.
- If necessary your child will be fitted for a prosthesis (artificial eye).
- Because retinoblastoma can be inherited, your family is encouraged to get genetic counseling to learn more about the disease (Picture 2).
- Exams and X-rays will be done from time to time to follow your child's response to treatments.

Picture 2 Your family is encouraged to get genetic counseling.

If you have any questions or concerns, be sure to talk with your doctor or nurse.