RETINOBLASTOMA

What is Retinoblastoma?

It is a type of eye cancer occurring in children. It occurs approximately 1 in every 20,000 births and it can be inherited from the parents.

What are the signs and symptoms of Retinoblastoma?



Abnormal white reflex from the eye under certain lighting conditions (referred to as leukocoria).





Apart from this, retinoblastoma may present with painful blind eye, altered color of the eye enlarged eye, very rarely it can primarily present as squint (inward or outward deviation of eye)

Who are at risk of developing Retinoblastoma?

Children of parents who had been affected with retinoblastoma are at a higher risk. But retinoblastoma can occur in any child between the age of 0-5 years.

How is Retinoblastoma detected?

The eye doctor examines the child for the presence of eye cancer using indirect ophthalmoscopy under anesthesia.

What are the other ancillary tests needed?

Ultrasound examination of the eye, CT Scan or MRI of the eye and brain.

How is Retinoblastoma treated?

It is treated using laser therapy, cryopexy, chemotherapy or radio therapy. In patients with advanced disease, enucleation may be needed.

What is laser treatment?

Laser treatment is the application of a powerful and focussed light energy on the cancer tissue to destroy it.

What is cryopexy?

Destruction of the cancer mass by applying an ice cold (-80 $^{\circ}$ C) probe.





Pre-treatment

Post-treatment

What is chemotherapy?

This procedure involves the injection of high dose of antimetabolite drugs through the intravenous route and is usually done in children with advanced or wide spread disease.

What is radiotherapy?

Destroying the cancer tissue by exposing the eye to high doses of ionizing radiation (same type of radiation used in taking X-rays) is known as radiotherapy.

What is enucleation?

In children with advanced eye cancer the above mentioned treatment modalities may not provide cure and so the whole of the eye may have to be removed. This procedure of removing the whole eyeball is called enucleation.

How will the child be rehabilitated after removal of the eyeball (enucleation)?

The cosmetic appearance can be improved by implanting plastic shells which are designed to look like real eyeballs.

Can Retinoblastoma spread to other parts of the body?

Yes, in advanced cases it can spread to other parts of the body. The brain, bone, liver and spleen may be affected. So early detection and timely treatment are of paramount importance.

At what intervals should the child be followed up?

Children who are at risk should be followed up every 3-6 months till the age of 7 years and yearly there after for 18 years.

What treatment is your child going to get?

Depending upon the type, size, extent and laterality of the tumour, the doctor will decide and discuss with you the mode of treatment. Sometimes your child may need one or two modes of therapy either in one or multiple sittings.

Early detection is essential to save the eye and life of your child. Consult your ophthalmologist immediately if you happen to see any one of the above mentioned eye signs in your child, and try to follow the protocol of management for a successful outcome.

Supported by





Paediatric Ophthalmology & Strabismus Dept., 1, Anna Nagar, Madurai - 625 020. Phone : (0452) 535 6100; Fax : 91-452-253 0984 E – mail: <u>childreneye@aravind.org</u> Web : www.aravind.org

Retinoblastoma



