

Nurses Role in the Care of Children With Retinoblastoma

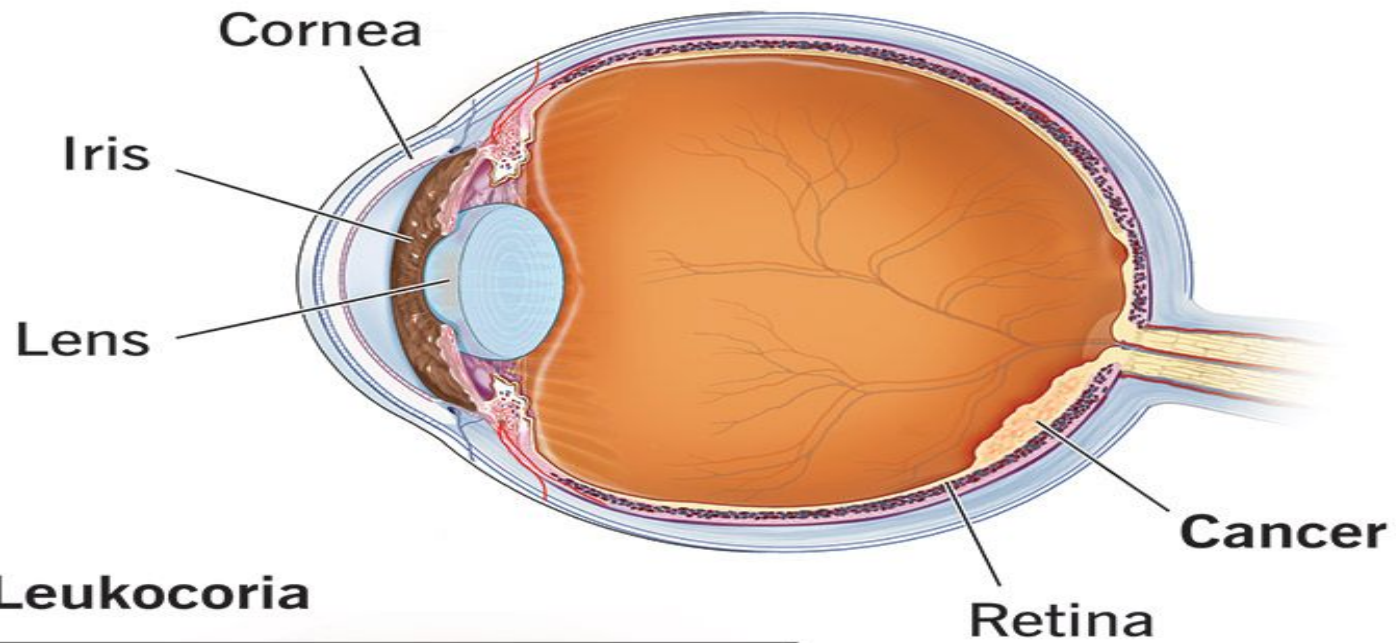
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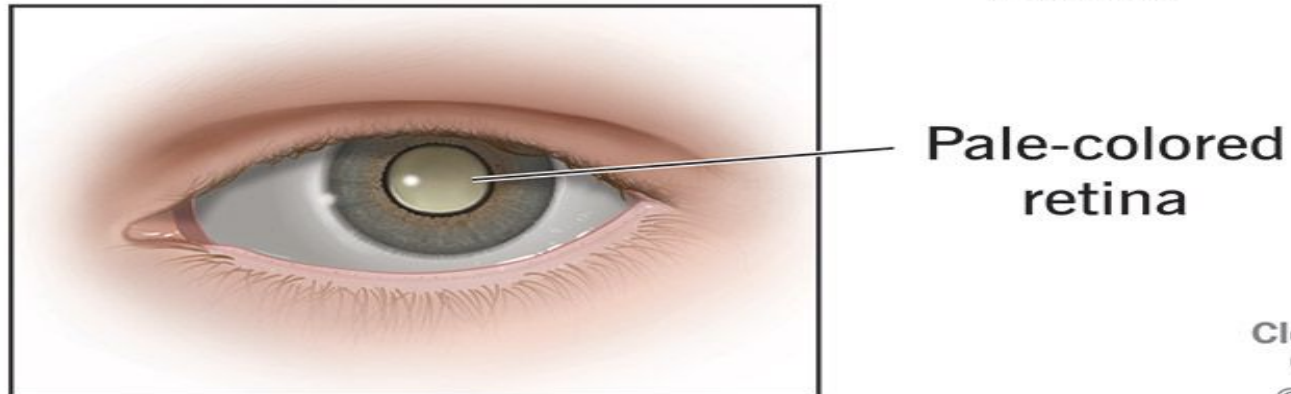
What is Retinoblastoma?

- Retinoblastoma (RB) is a type of eye cancer that starts in the retina, the light-sensing layer of cells at the back of the eye.
- The retina converts light into nerve signals, sends those signals along the optic nerve to the brain. The brain thus processes the signals into a sense of vision. RB is the most common intraocular malignant tumor of childhood.
- RB presentation comprises of; proptosis, leucocoria, spontaneous hyphema, secondary glaucoma, and strabismus and Vision loss.
- RB in children, may result from random gene errors that sometimes occur when cells divide to make new cells.
- There are no known lifestyle-related or environmental causes of retinoblastoma, so prevention is out of play

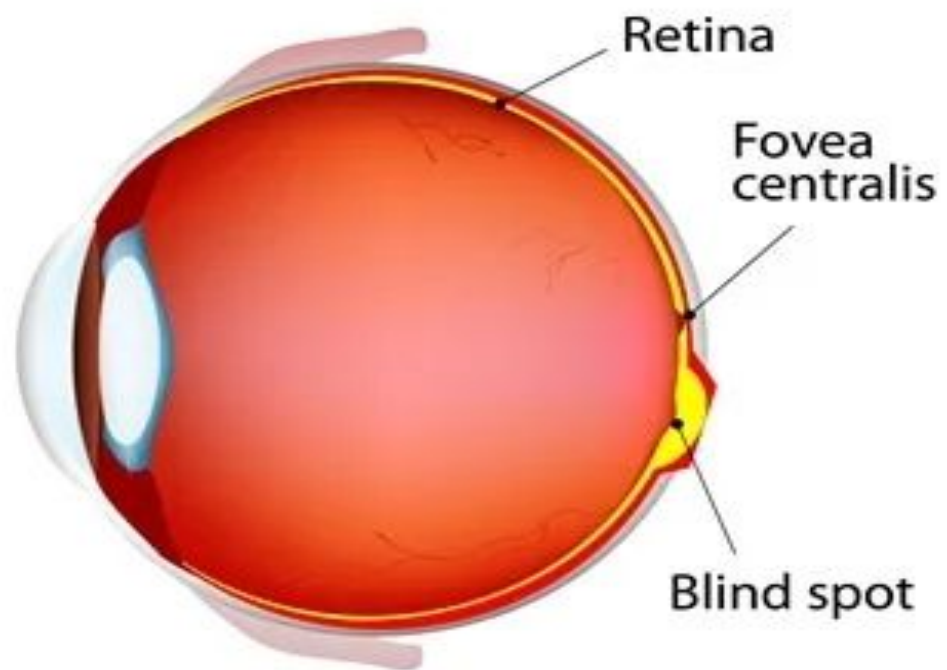
Retinoblastoma



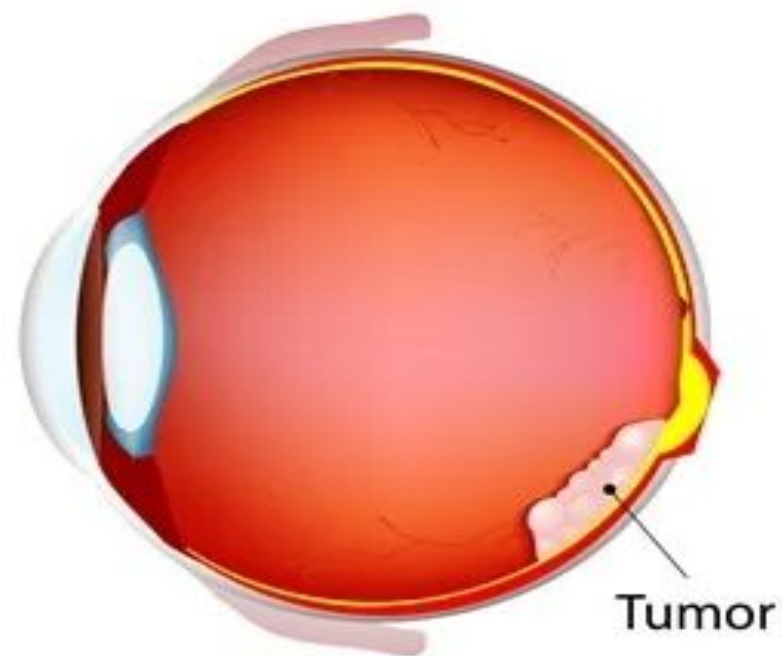
Leukocoria



Healthy eye



Retinoblastoma



Various clinical presentations of retinoblastoma



Strabismus



Red Eye



Leucocoria



Shrunken Eyeball



Orbital mass

Nurses Roles

- Nurses play a crucial role in the comprehensive care of children with retinoblastoma including; early detection and screening, diagnosis, treatment, chemotherapy, radiotherapy, surgery, palliative care among others
- Nursing care following **retinoblastoma surgery** is specific and complicated therefore require specific nursing care.
 - The process aims at ensuring the child's holistic well-being and successful recovery.
 - The three key focus areas include **surgical site care, pain management, and complication monitoring.**
- The roles are thus summarized as below:

Early Detection and Screening

- **Promoting awareness:**

- Nurses can educate parents and primary care providers about retinoblastoma, its symptoms (like leukocoria or a white reflex in the eye), and the importance of early detection.

- **Screening:**

- Nurses can assist in performing eye exams and other screening procedures to identify retinoblastoma early.

Diagnosis

- Diagnostic counseling
- Collaborating with other professionals to optimize patients' comfort and families' understanding and adaptation

Treatment: Chemotherapy

- Treatment of extraocular retinoblastoma (cancer has spread to the area around the eye) may include the following:
 - Systemic chemotherapy and external-beam radiation therapy.
 - Enucleation and Systemic chemotherapy followed by surgery (enucleation)
- Administration of Chemotherapy ;
 - Checking the treatment protocol and cross checking the prescription for correctness
 - Education of the patient and family about the drugs prior to administration
 - Ensures that a correct drug and dose are administered by the correct route to the right patient.
 - Documentation and reporting
 - Monitoring the patient, for any side effects, adverse effects and reports appropriately
 - Providing Psychological and emotional support

Treatment: Surgery:

Pre-operative Care:

- **Admission:**

- Registers the child in the admission book and takes relevant notes
- Ensures a comfortable environment; Locates the bed for the patient
- Take vital signs and documents,
- Ensures that blood workup done as required by the surgeon.
- Books blood form lab and picks it to theatre for surgery

- **Patient and family Education:**

- Nurses extend an explanation about the diagnosis, treatment plan, and what to expect during and after treatment to the child and family.
- Provides Counseling; addressing their concerns and anxieties.

- **Preparation:**

- They ensure the child is prepared for surgery or other procedures, including pre-operative medications, fasting, and emotional support.
- Ensures hygiene
- Guide the patient through the consent process

Treatment: Surgery:

Intra-operative Care:

- **Monitoring:**

- Nurses monitor the child's vital signs and other parameters during surgery or other procedures, ensuring their safety and well-being.

- **Collaboration:**

- They work closely with the surgical team to provide support and assistance during the procedure.

Treatment: Surgery:

Post-Operative Care:

- **Surgical Site Care:**

- Nurses manage the surgical site, cleans up the sockets, changes the dressings, monitors for complications, and provide wound care.

- **Pain Management:**

- They assess and manage pain, using a variety of methods, including medication and non-pharmacological techniques.

- **Complication Monitoring:**

- Nurses are vigilant for signs of complications, such as infection, bleeding, or vision problems, and take appropriate action.

- **Emotional Support:**

- Nurses provide emotional support to the child and family, helping them cope with the diagnosis and treatment.

Follow-up:

- **Long-term care:**

- Encourages care givers to report any abnormal sign and symptom
- Continuous monitoring for recurrence or late effects of treatment.
- Registers the patient's next appointment and ensures safe file storage.

- **Education:**

- Educates the child and family about managing any long-term needs, such as vision impairment or other health issues.
- Child's wellbeing
- Nutrition
- Self care and Personal hygiene

- **Coordinates Referral :**

- Nurses coordinates and refer families to appropriate resources; appropriate health facilities, social support groups, palliative care centers,