



**Pediatric cataracts** are a clouding of the lens at birth (**congenital**) or developing in childhood (**developmental**). They can be **unilateral** or **bilateral**.



**Bilateral cataracts**

## PRESENTATION

- **Abnormal red reflex** that is diminished, white (leukocoria), or asymmetrical
- **Strabismus** (improper alignment of the eyes)
- **Poor visual fixation**
- **Delayed visual milestones**
- **Nystagmus** (rapid, repetitive, uncontrolled eye movements)



**Left eye leukocoria**

## ETIOLOGY

### CONGENITAL

- **Genetic**
  - **Familial (common)**
  - Down syndrome
- **Infectious**
  - **TORCH** (Toxoplasmosis, Other [syphilis], Rubella, Cytomegalovirus, Herpes simplex)
- **Metabolic**
  - Galactosemia
  - Hypocalcemia

### ACQUIRED

- **Idiopathic**
  - (common, especially when unilateral)
- **Trauma**
- **Drug-induced**
  - Prolonged corticosteroid use
- **Ocular disease associated**
  - Uveitis
  - Prior intraocular surgery
- **Metabolic**
  - Diabetes mellitus

## COMPLICATIONS

- **Amblyopia: Decreased visual acuity** in affected eye due to abnormal visual pathway development
- **Cataract associated blindness**

Any children with abnormal eye findings must be **promptly** referred to a pediatric ophthalmologist.



## DIAGNOSIS

- **Screening** in **neonatal** exams and **well-child** visits:
  - Red reflex
  - Pupil exam
  - Fixation and following
  - Cover-uncover test
- **Slit Lamp Examination**

### INVESTIGATIONS

- **Laboratory Testing** depending on clinical history could include: TORCH titers, Syphilis testing, Ca<sup>2+</sup>, phosphorous, glucose, galactokinase, genetic testing, urine test (glucose and protein)



## MANAGEMENT

- **Cataract surgery:** The cloudy lens is **removed** and **replaced** with an artificial clear lens.
  - Ideal to be completed between **6-10 weeks** for congenital cataracts to prevent irreversible amblyopia.
- **Nonsurgical treatment:** **Patching** and **glasses**; managing **identified causes** (uveitis, diabetes, etc.)

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