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# Cerulean Cataract in a Female Home Maker

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***Abstract***
*We report a rare case of cerulean cataract or blue dot cataract in a female home maker who came to our out patient department with chief complaints of diminution of vision in the right eye for distant objects since 2 years and with history headache since past 6 months. Cerulean cataracts are a rare form of cataract characterized by blue and white opacifications scattered in the nucleus and cortex of the lens. On diffuse slit lamp examination, it showed multiple white dot opacities present in the periphery of the cortex of lens suggestive of blue dot cataract. Progression of cerulean cataracts is slow and often result in posterior subcapsular opacification that requires lens extraction in adults. Hence observation and follow up is required in this patient.*

***Keywords:*** *Cerulean cataract , Blue dot cataract, young female .*

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## I. Case Report

A 33 year old female home maker came to our out patient department with chief complaints of diminution of vision in the right eye since 2 years which was insidious in onset,gradually progressive in nature, painless and more during night time. Also gives history of headache which was dull aching and intermittent in nature with no aggravating factors and relieved on taking medications.No h/o any ocular trauma,ocular surgery and with no comorbidities. With nothing significant family history. Her best corrected visual acuity (BCVA) is 20/60 and 20/20 in the right eye and left eye, respectively. On diffuse slit lamp examination showed multiple white opacities in the cortex of lens suggestive of cerulean cataract as shown in figure 1 and 2.Her intraocular pressure was 12mmHg and 14mmHg measured in goldmann applanation tonometry.On fundus examination right eye showed tilted optic disc and in left eye showed myelinated nerve fiber superiorly to the optic disc.Blue dot cataract diagnosed clinically by diffuse slit lamp examination.we advised spectacle correction and regular follow up.

**RIGHT EYE** **LEFT EYE**

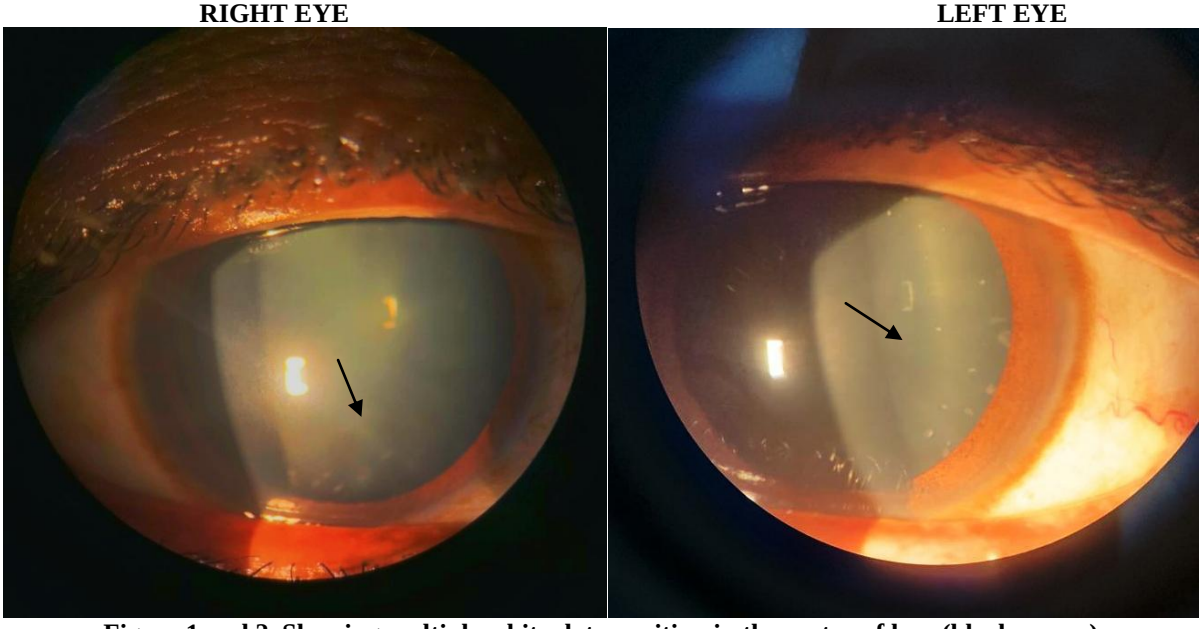

**Figure 1 and 2. Showing multiple white dot opacities in the cortex of lens (black arrow)**

## II. Discussion

Cerulean or blue-dot cataracts or cataracta punctata caerulea( Their name is derived from the Latin word "caeruleus" which means "dark blue" ) are autosomal dominant early onset bilateral cataracts with concentric layers of bluish-white opacities which may form large cuneiform shapes in the mid-periphery. These appear from birth to early childhood but may not be diagnosed until adulthood. It may be caused by mutations in certain genes: crystallin β-B2 (CRYBB2), crystallin γ-D (CRYGD), musculoaponeurotic fibrosarcoma and major intrinsic protein genes.The mutations in these genes are responsible for early onset pulverulent cataract and cerulean cataract.

Patients with cerulean cataract do not have any associated systemic comorbidities and need not to be evaluated.Blue dot cataracts are normally asymptomatic until the age of 18-24 months and there are rarely removed until adolescence.when patients detect a progressive loss of vision in both eyes. Children who show evidence of visiually significant cataracts such as nystagmus and amblyopia,and other hand surgical cataract removal and posterior chamber intraocular lens implantation are used to treat the condition.

## III. Conclusion

Blue dot cataract have no known treatments to prevent their development and progression.The standarad of management includes regular eye tests and eventually, cataract surgery.A SICS or Phacoemulsification surgery may be performed.

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