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INTERNATIONAL JOURNAL OF ADVANCED RESEARCH (IJAR)

Article DOI: 10.21474/IJAR01/14114
DOI URL: http://dx.doi.org/10.21474/IJAR01/14114

RESEARCH ARTICLE

COLOBOMA OF IRIS AND CHOROID: A CASE REPORT

Ennejjar Amine, Salma Moutamani, Taha Boutaj, Abdellah Amazouzi and Ouafa Cherkaoui
Ophthalmology Department "A", Ibn Sina University Hospital (Hôpital Des Spécialités), Mohammed V University, Rabat, Morocco.

Manuscript Info

Manuscript History
Received: 20 November 2021
Final Accepted: 23 December 2021
Published: January 2022

Key words:-
Coloboma, Iris, Choroid, Retina

Abstract

Ocular coloboma is a rare malformation which occurs as an isolated defect in healthy individuals or be part of a complex malformation syndrome of known or unknown etiology. Patients with coloboma of iris and choroid complicated with cataract should have a cataract surgery to improve their BCVA, if there is no retinal detachment.We report the case of a coloboma of iris and choroid in the right eye of a male following a consultation.The patient had a inferonasal coloboma of iris, which resulted in the pear-shaped pupil in the left eye, and opaqueness of lens, may result in the lower visual acuity. Fundus examination revealed a large inferior choroidal coloboma under the optic disc in the left eye, which was about seven-disc areas.

Introduction:-

Ocular coloboma, generally classified as typical and atypical, is a rare malformation occurred as an isolated defect in healthy individuals or a part of a complex malformation syndrome. In typical ones, iris coloboma and choroid coloboma often exist concomitantly and are associated with early cataractous changes. In this report, we described a case of one patient with coloboma the iris and choroidal associated with complicated cataract.

Case Report:

We present the case of a 40 years old male, with no medical history, who presented to the consultation. His complaint was a progressive deterioration of vision in the left eye over about six months period. The visual acuity was 6/20 in the left eye and no light perception in the right eye for more than twenty years. The cornea of the right eye was muddy after an eye injury and we could not identify the intraocular structure. Examination of the left eye found a clear cornea. Obviously, the patient had an inferonasal coloboma of iris (Figure 1), which resultedin the pear-shaped pupil in the left eye, measuring 3 mm at the limbus. The lens was in normal position and opaque. There were some gaps in the zonular fibers visible thru the coloboma. The opaqueness of lens in the left eye, may result in the lower visual acuity. Fundus examination revealed a large inferior choroidal coloboma under the optic disc in the left eye, which was about seven-disc areas. (Figure 3). The surface of the exposed sclera was not ecstatic and was traversed by a small blood vessel apparently belonging to the retinal circulation. Fortunately, the macular lutea of the retina was not affected. (Figure2) No retinal break was visible in the area of the coloboma or in the periphery. No obvious retinal detachment was observed in both eyes. The IOP was within normal range.Because of the severe lens opacity in the left eye and the low visual acuity, the patient accepted the suggestion of cataract surgery for this eye. Consequently, phacoemulsification and intraocular lens implantation were performed on the right eye. Three days after surgery, the visual acuity of the right eye was 14/10.

Corresponding Author:- Ennejjar Amine
Address:- Ophthalmology Department "A", Ibn Sina University Hospital (Hôpital Des Spécialités), Mohammed V University, Rabat, Morocco.

Discussion:-

Congenital ocular colobomas are due to incomplete closure of the fetal fissure during organogenesis. Ocular involvement can be variable ranging from a simple hole in the iris to a more severe involvement of the posterior pole (coloboma of the optic nerve, of the choroid, of the retina). Ocular coloboma is a rare malformation which occurs as an isolated defect in healthy individuals or be part of a complex malformation syndrome of known or unknown etiology [1-3]. Coloboma is generally classified as typical or atypical, depending on their location in the iris or fundus. Typical iris coloboma is usually assumed as a complete thickness defect of the iris stroma and pigment epithelium which extends inferonasally to the corneoscleral limbus. Therefore, pear-shaped pupil is the characteristic change in typical iris coloboma. Typical chorioretinal coloboma, often affecting both eyes, is usually glistening white defects with distinct margins often rimmed by irregular pigment clumps. Typical iris and choroid coloboma often exist concomitantly and are associated with congenital microphthalmos or/and optic nerve Coloboma [1]. It is reported that chorioretinal coloboma occurs in 0.14% of the general population, and 40% of affected individuals may develop retinal detachment sometime during their lifetime [4,5]. Gopal et al., reviewed 85 eyes of 81 patients with retinal detachments related to coloboma of the choroid [6]. According to the report, retinal detachment could occur in eyes with choroidal coloboma because of a retinal break outside the colobomatous area, at the margin of the coloboma, or over the coloboma [6]. It has been reported that persistent fetal vasculature and fundal coloboma are important congenital vitreoretinal disorders that can severely affect a child's visual acuity [7]. In our case here, no retina lesion, macular lesion, retinal breaks and retinal detachment presented. Therefore, we speculated that the cataract may be the main factor resulting in the low visual acuity.

Conclusion:-

Ocular coloboma is a rare malformation which occurs as an isolated defect in healthy individuals or be part of a complex malformation syndrome of known or unknown etiology. patients with coloboma of iris and choroid complicated with cataract should have a cataract surgery to improve their BCVA, if there is no retinal detachment.

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Figure 2: Fundus photography of the left eye: inferior choroidal coloboma under the optic disc, the macular lutea of the retina not affected.

Figure3: Fundus photography of the left eye: Large inferior choroidal coloboma under the optic disc.

Figure 1:- Anterior segment photography of the left eye before surgery: inferonasal coloboma of iris, which resulted in the pear-shaped pupil in this eye.

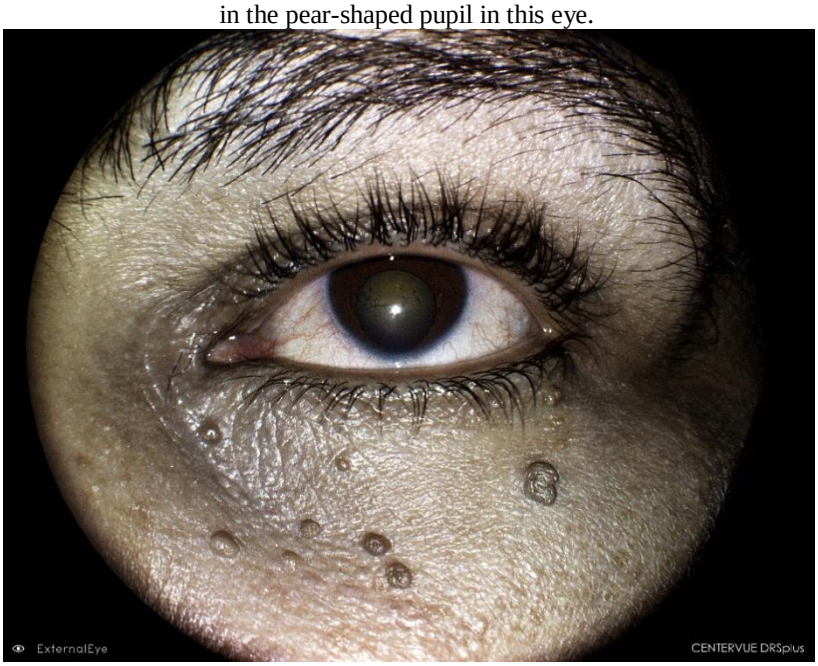


Figure 2:- Fundus photography of the left eye: inferior choroidal coloboma under the optic disc, the macular lutea of the retina not affected.

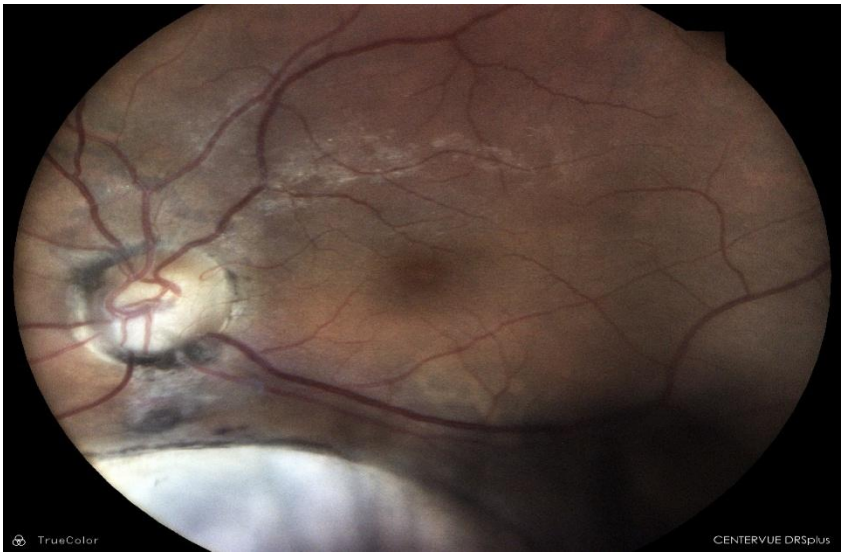
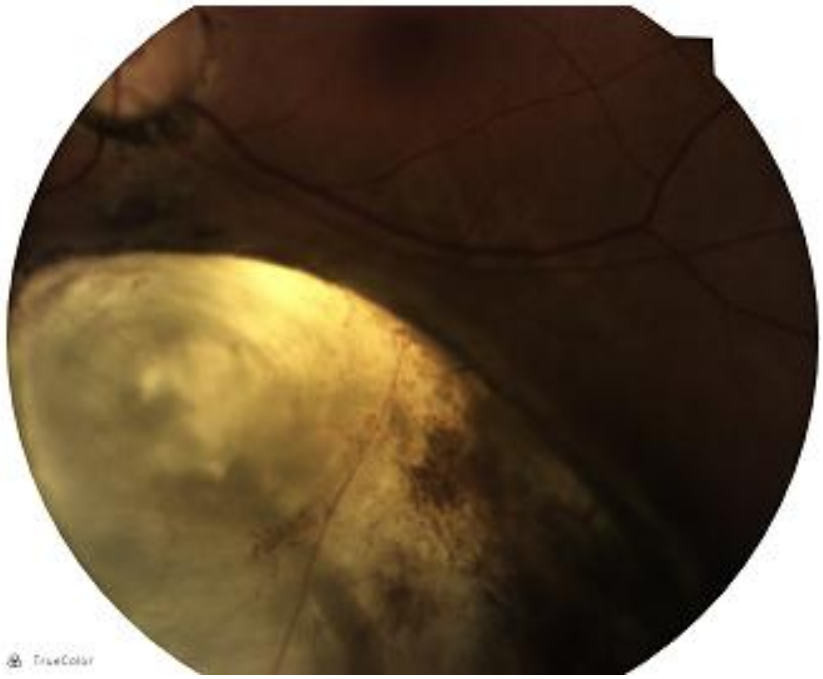


Figure 3:- Fundus photography of the left eye: Large inferior choroidal coloboma under the optic disc.



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