Journal of Palliative Care & Medicine
ISSN: 2165-7386
Ould Hamed et al., J Palliat Care Med 2018, 8:3
DOI: 10.4172/2165-7386.1000336
Image Article
Open Access

Axenfeld-Rieger Syndrome

Mohamed Abdallahi Ould Hamed*, Abdoulsalam Youssoufou Soulay, Karim Reda and Abdelbarre Oubaaz

Department of Ophthalmology, Med V Military Hospital of Rabat, Morocco

***Corresponding author:** Mohamed Abdallahi Ould Hamed, Department of Ophthalmology, Med V Military Hospital of Rabat, Morocco, Tel: +212655835932 ; E-mail: badahick@gmail.com

Received date: May 21, 2018; **Accepted date:** May 24, 2018; **Published date:** May 31, 2018

Introduction

We report the case of a patient aged 47 who consult for a decrease in visual acuity. Examination of the anterior segment spotting unilateral irrido-trabecular dysgenesis of the right eye with abnormal visibility of the schwalbe line corresponding to a posterior embryotoxon and associated angular abnormalities (Figures 1-3).

The eye tone measured with Goldmann tonometer showed 14 mmHg in the right eye and 15 mmHg in the left eye. The examination of the fundus of the eye finds symmetrical morphology of the optic discs without pathological papillary excavation.

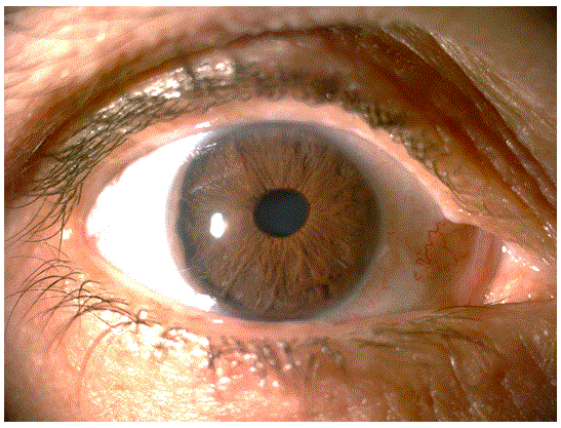

Figure 1: Embryotoxon on the temporal side of the right eye.

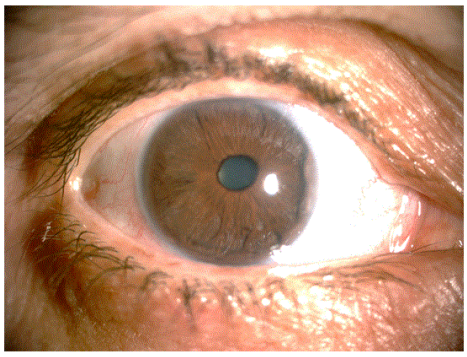

Figure 2: Embryotoxon on the nasal side of the right eye.

The remainder of the somatic examination reveals no abnormality associated especially the absence of dental malformation. Chronic glaucoma is seen in 50% of patients [1]. The diagnosis of Axenfeld-Reiger syndrome uncomplicated of chronic glaucoma has been established, despite the absence of signs of Rieger [1]. No treatment has been established. Regular checks have been proposed to detect any complications including glaucoma.

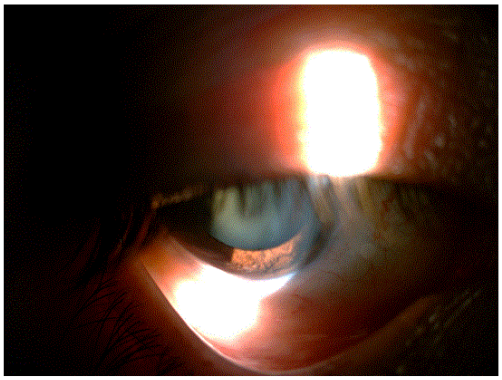

Figure 3: Angular abnormalities of the right eye.

Conclusion

This syndrome is inherited as an autosomal dominant manner. It is found that 2 genes are mainly involved in the transmission; *PITX2* gene in 4q25, present in 10-60% of patients, mainly associated with systemic alterations such as dental malformations [2,3].

The other gene responsible is *FOXC1* located in 6q25, present in 50% of cases and manifested by ocular alterations, especially glaucoma [2-4]. The differential diagnosis arises with the Peters anomaly which consists of a defect of the posterior surface of the cornea associated with a stromal opacity. Currently, it is suggested that all these abnormalities are actually part of the same syndrome, Axenfeld-Rieger syndrome [5].

References

1. Alward WL (2000) Axenfeld-Reiger syndrome in the age of molecular genetics. Am J Ophthalmol 130: 107-115.
2. Reis LM, Tyler RC, Kloss BA, Schilter KF, Levin AV, et al. (2012) PITX2 and FOXC1 spectrum of mutations in ocular syndromes. Eur J Hum Gene 20: 1224-1233.
3. Strungaru MH, Dinu I, Walter MA (2007) Genotype-phenotype correlations in Axenfeld-Rieger malformation and glaucoma patients with FOXC1 and PITX2 mutations. Invest Ophthalmol Vis Sci 48: 228-237.

4. Honkanen RA, Nishimura DY, Swiderski RE, Bennett SR, Hong S, et al. (2003) A family with Axenfeld-Rieger syndrome and Peters anomaly caused by a point mutation (Phe112Ser) in the FOXC1 gene. Am J Ophthalmol 135: 368-375.

5. Chang TC, Summers CG, Schimmenti LA, Grajewski AL (2012) Axenfeld-Rieger syndrome: New perspectives. Br J Ophthalmol 96: 318-322.