



Isolated Bilateral Iridoschisis: A Case Report

N Shaban*, S Bouchriha, MA EL Kettani, S Belghamaidi, I Hajji and A Moutaouakil

Ophthalmology Department, Mohammed VI University Hospital Center, Avenue Ibn Sina, Marrakech, Morocco

***Corresponding Author:** N Shaban, Ophthalmology Department, Mohammed VI University Hospital Center, Avenue Ibn Sina, Marrakech, Morocco.

Received: March 26, 2024

Published: May 22, 2024

© All rights are reserved by **N Shaban, et al.**

Abstract

Iridoschisis is a rare degenerative pathology in which the anterior iris stroma spontaneously cleaves from the posterior layer, The anterior leaflet then dissociates into fibrils floating in the aqueous humor.

We report the case of a 66-year-old patient consulted for a bilateral decrease in visual acuity.

All other causes of iris atrophy have been eliminated (trauma, herpes).

The diagnosis of this entity is important since its frequent association with glaucoma imposes its detection and long-term monitoring.

Keywords: Iridoschisis; Iris Atrophy; Degenerative Pathology

Introduction

Iridoschisis is a rare degenerative pathology, bilateral and non-hereditary in the elderly, occurring during the sixth and seventh decade and during which the stroma of the iris separates in two layers, an anterior leaflet then disintegrates into fibrils floating in the aqueous humor, and the posterior leaflet that remains attached to the dilator muscle and iridal pigmented epithelium [1].

Clinically, the lower part of the iris is most frequently affected. The anterior surface cleaves into filaments that float in the anterior chamber, but the pupil is not distorted and the cornea is usually clear [1,2].

Patient presentation

We report the case of a 66-year-old patient who consulted for a bilateral decrease in visual acuity. The ophthalmologic examination showed visual acuity of 5/10 in the right eye and 5/10 in the left eye, a transparent cornea on the right and left eye, a normal anterior chamber depth, a round and centered pupil, and bilateral inferior iris atrophy more marked in the left eye (Figure 1 and 2). The IOP was 14mmHZ: OD, 15mmHg: OS by an applanation tonometer,

the lens examination revealed a bilateral senile nuclear sclerosis and the fundus showed a normal excavation and flat retina.

The gonioscopy and visual field was without particularity.

Discussion

Iridoschisis is a rare, bilateral, degenerative pathology of the in the sixth and seventh decades of life. at part of the iris stroma separates into two sheets, the anterior portion of which splits into fibrils [1]. It leads to the late and progressive destruction of the anterior stroma. Very few cases of iridoschisis have been reported in the literature to date [1,2]. Biomicroscopically, the lower part of the iris of the iris is most frequently affected. The anterior surface into filaments that float in the anterior chamber, without pupillary deformation, and the cornea is usually clear [3].

The etiopathogenesis of this condition remains poorly understood. Several hypotheses have been put forward: vascular atrophy secondary degeneration (trauma, post-inflammatory vascular atrophy, secondary degeneration (trauma, post-inflammatory post-inflammatory synechiae), or congenital predisposition [4].

Loewenstein and Foster have suggested the existence of a lytic substance present in the aqueous humor which, in anatomically predisposed anatomical conditions, cause cleavage of the iris [5]. Albers and Klein, on the other hand, attributed iridoschisis to sclerosis of the blood vessels increases in the anterior of the stroma, the action of constriction and dilation of the iris cause dissociation of the anterior surface of the iris stroma [6].

Histopathological study revealed fibrotic and atrophic iridal tissue atrophic iridal tissue with pigmented layers of posterior stroma irregularly arranged, with thinning of the iridal stroma with a reduction in the number of collagen fibers, whereas Page number not for citation purposes 3 appearance of nerves and blood vessels are normal in this area [3].

In iris angiography, reductions in vascular caliber and fluorescein diffusions in areas of atrophy [7].

The positive diagnosis of iridoschisis is clinical, based on the biomicroscopic appearance of the iris stroma, which separates into two layers an anterior layer that splits into fibrils that fluctuate in the aqueous and a posterior layer that remains attached to the dilator muscle muscle and retinal pigment epithelium.

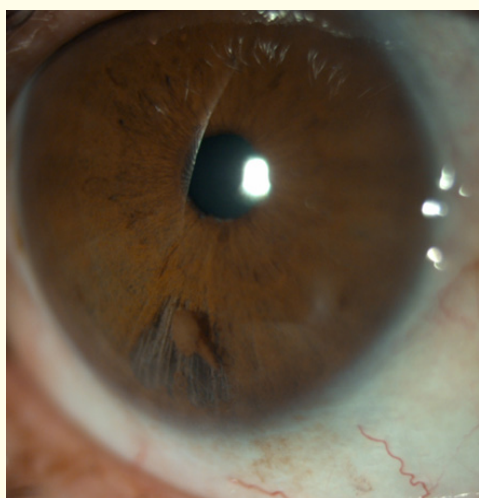


Figure 1: Right eye inferior iridoschisis.

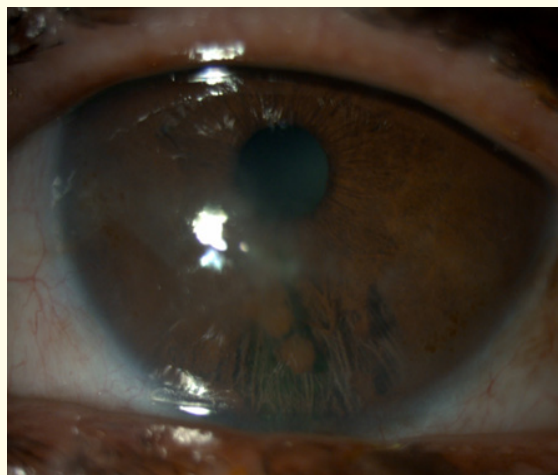


Figure 2: Left eye with more marked inferior iridoschisis.

Conclusion

Iridoschisis is a rare acquired iris degenerative pathology, usually bilateral, characterized by degeneration of the anterior stromal layer of the iris and its frequent association with secondary glaucoma. Glaucoma was not a feature in this patient, but as 65% of patients with iridoschisis present with glaucoma, it is possible that this patient could develop glaucoma years later.

Bibliography

1. É Agard., et al. "L'iridoschisis, une forme particulière d'atrophie irienne". *Journal Français D'ophtalmologie* 36.4 (2013): 368-371.
2. Schoneveld PG and Pesudovs K. "Iridoschisis". *Clinical and Experimental Optometry* 82.1 (1999): 29-33.
3. Rodrigues MC., et al. "Iridoschisis associated with glaucoma and bullous keratopathy". *American Journal of Ophthalmology* 95 (1983): 73-81.
4. JM Giraud and JP Renard. "Dégénérescence de l'iris et du corps ciliaire". *EMC Ophtalmologie* (2009).
5. Loewenstein A and Foster J. "Iridoschisis with multiple rupture of stromal threads". *British Journal of Ophthalmology* 29 (1945): 277-282.

6. Albers EC and Klien BA. "Iridoschisis, a clinical and histopathologic study". *American Ophtalmology* 46 (1958): 794-802.
7. Carnevallini A., et al. "Aspect fluoroiridographique de l'iridoschisis». *Journal Français d'Ophtalmologie* 11.4 (1988): 329-332.
8. G Laccarino., et al. "Iridoschisis et glaucome par fermeture de l'angle". *Journal Français d'Ophtalmologie* 29 (2006): e26.