

Images in clinical medicine



Unilateral pigment dispersion syndrome

Taoufik Abdellaoui, Abdelbarre Oubaz

Corresponding author: Taoufik Abdellaoui, Department of Ophthalmology, Military Teaching Hospital Med V, University Mohammed V, Rabat, Morocco. rowman_xrd@hotmail.com

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Unilateral pigment dispersion syndrome

Taoufik Abdellaoui^{1,&}, Abdelbarre Oubaz¹

¹Department of Ophthalmology, Military Teaching Hospital Med V, University Mohammed V, Rabat, Morocco

[&]Corresponding author

Taoufik Abdellaoui, Department of Ophthalmology, Military Teaching Hospital Med V, University Mohammed V, Rabat, Morocco

Image in medicine

A 40-year-old woman who presented for prescription of glasses. She had no history of ocular trauma, inflammation, or any ocular disease. Refraction was -1,25D in the right eye, and -1 in the left eye. Corrected visual acuity was 6/6 in both eyes. Slit-lamp biomicroscopy revealed a Krukenberg spindle in the right eye (A, B, C). At gonioscopy, the iridocorneal angle was widely open, with posterior insertion of the iris, and a Sampaolesi line (D). The angle of the left eye was normal. The intraocular pressure (IOP) was 14mmhg. Fundus examination was normal, with no optic disc alterations in both eyes. Pigment dispersion syndrome (PDS) is an ophthalmic condition defined as a dispersion of melanin pigment in the anterior segment. The release of melanin pigment results from the friction of the

peripheral region of the posterior epithelium of the iris against the anterior zonular fibers. This friction causes pigment dispersion and iris transillumination. Pigment dispersion leads to the typical corneal pigmentation or Krukenberg spindle generally appears as a central, elongated, brown band on the corneal endothelium, and pigment accumulation on the trabecular meshwork. Pigment on the trabecular meshwork can lead to trabecular alterations and increased

IOP. This can be associated with glaucomatous optic neuropathy: pigmentary glaucoma. PDS, more common in myopes, typically involves both eyes. Unilateral involvement is unusual. The differential diagnosis, especially when it's unilateral can be challenging and meticulous examination is warranted to make a distinction from other conditions where there is dissemination of pigment such as trauma, inflammation, tumors, and pseudoexfoliation.

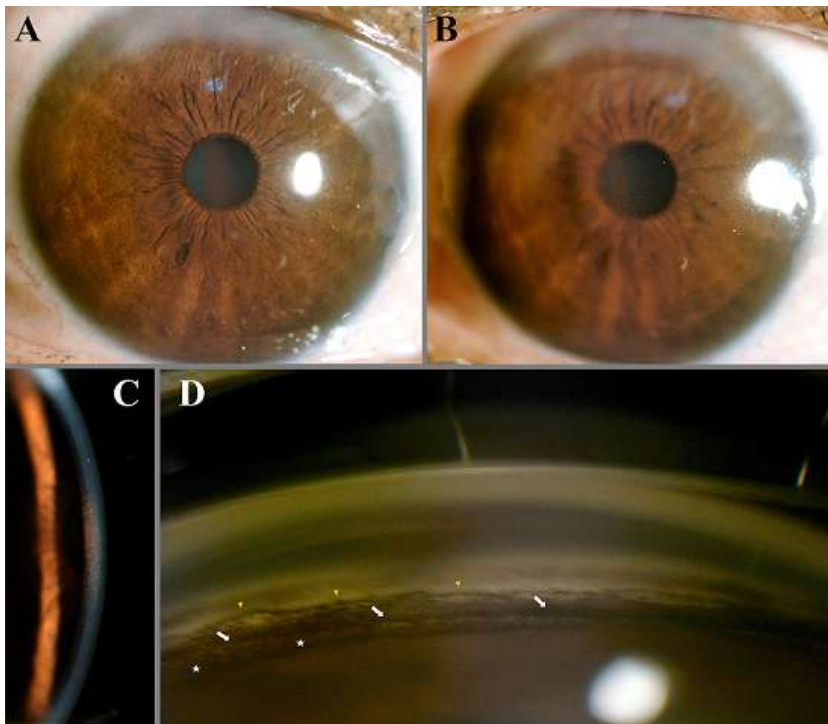


Figure 1: right eye examination: (A,B,C): Krukenberg's spindle; (D): widely open iridocorneal angle with a posterior insertion of the iris (asterisk), pigment accumulation on the trabecular meshwork (arrows) with a Sampaolesi line (arrowheads)