

Exfoliation syndrome mimicking uveitis

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Case 1

A 73-year-old woman with a 10-year history of glaucoma was referred for evaluation. Her visual acuity was hand motions in the right eye and 20/25 in the left eye. Slit lamp examination showed cornea guttata with epithelial and stromal edema in her right eye (**Figure 1**). There were numerous particles of exfoliation material and pigment on the central endothelium. Her left cornea had mild guttata and slight pigment deposition on the endothelium. The anterior chambers were clear in both eyes. Her right iris had peripupillary transillumination defects and loss of the pupillary ruff. There was a dense nuclear cataract OD. Intraocular pressure (IOP) was 42 mm Hg OD and 16 mm Hg OS with timolol 0.25%. Exfoliation material was present on the lens OD. Gonioscopy revealed grade III angles with 2+ trabecular meshwork pigmentation and Sampaolesi lines OU.

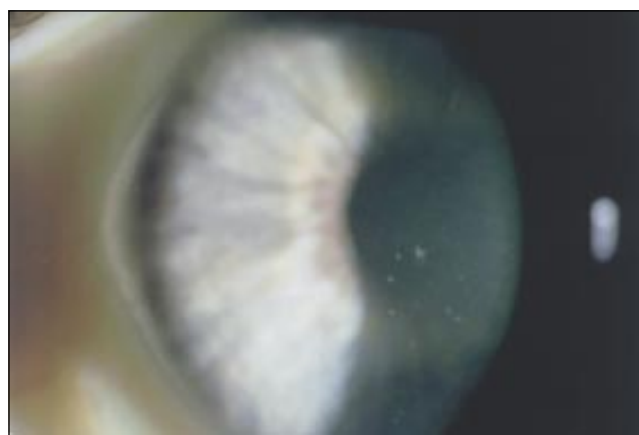


Figure 1. Right eye of patient 1 showing exfoliation flakes and pigment on the corneal endothelium with corneal haze, giving a pseudo-inflammatory appearance.

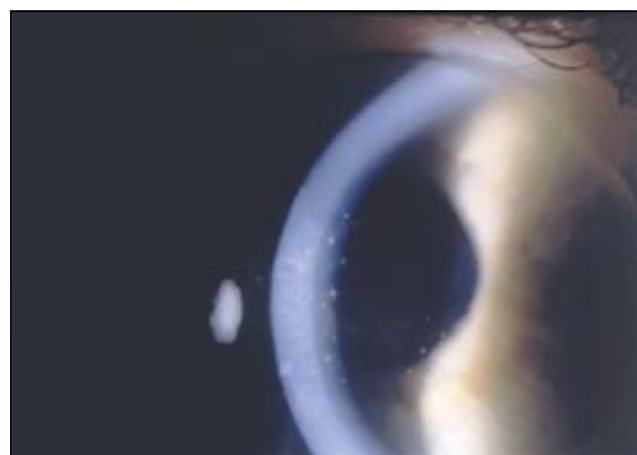


Figure 2. Diffuse deposition of exfoliation material and pigment on the corneal endothelium of patient 2.

Case 2

A 64-year-old woman was admitted to the service with uncontrolled glaucoma OD. Exfoliation material and pigment particles were diffusely distributed on the right corneal endothelium (**Figure 2**). The left cornea was clear. Both anterior chambers were clear. Exfoliation materials were present on the pupillary border and lens in the right eye only. IOP was 27 mm Hg OD and 17 mm Hg OS. Gonioscopy revealed grade IV angles, with 2+ pigmentation and Sampaolesi lines.

Comment

Exfoliation syndrome is characterized by deposition of a white fibrillogranular material throughout the anterior segment. Flakes of exfoliation material can be found

occasionally on the corneal endothelium. Rarely, it can be diffusely distributed over the cornea, mimicking the appearance of inflammatory keratic precipitates as seen in Fuchs heterochromic iridocyclitis or it may be concentrated in Arlt's triangle inferiorly, resembling the distribution of inflammatory keratic precipitates observed in granulomatous uveitis.¹ When clinical signs of exfoliation syndrome are prominent, the diagnosis is readily apparent. However,

in aphakic or pseudophakic eyes, it may be more difficult to discern because of the absence of the classic distribution of the exfoliation material on the lens capsule. Careful inspection, however, reveals the nature of the material. Pigment deposition on the cornea can occur in exfoliation syndrome and occasionally may have the appearance of a Krukenberg spindle, but usually the particles are larger and more diffusely distributed, as may also occur in uveitis.²

References

1. Chern K, Meisler DM, Rockwood EJ, Lowder CY. Pseudoexfoliation syndrome masquerading as uveitis. *Am J Ophthalmol* 1994;118:392-393.
2. Ritch R, Schlötzer-Schrehardt U. Exfoliation syndrome. *Surv Ophthalmol* 2001;45:265-315.