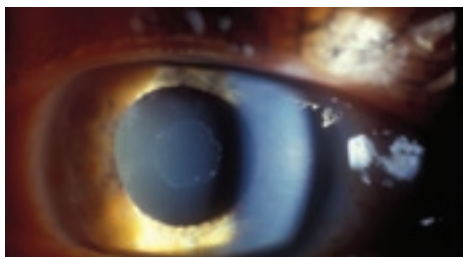


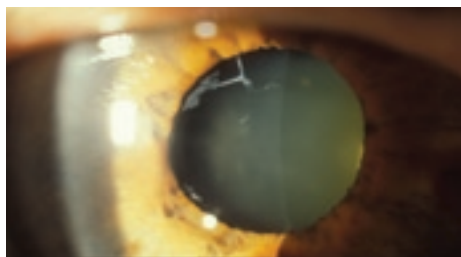


Pseudoexfoliation glaucoma (PXF)

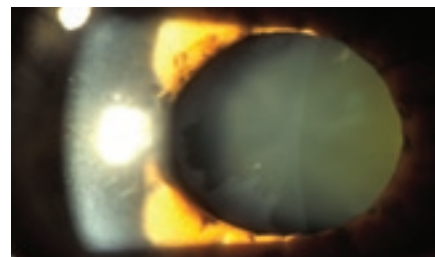
Exfoliation glaucoma, Pseudoexfoliation syndrome (PEX), Exfoliation syndrome (XFS)



Central ring of pseudoexfoliation material on anterior lens capsule



Wisp of pseudoexfoliation material on pupil margin



Pseudoexfoliation on lens capsule adjacent to pupil margin

DESCRIPTION

Pseudoexfoliation (PXF) glaucoma is a secondary open-angle glaucoma, arising from trabecular blockage. Pseudoexfoliation (or exfoliation) refers to a grey-white flaky material observed on the anterior surface of the crystalline lens. The material appears as if there has been shedding of epithelial cells from the lens capsule, hence the name 'exfoliation'. However, the material is believed to be systemically synthesised, as well as from lens capsule, iris and ciliary body.

The PXF material is deposited on all surfaces throughout the anterior chamber, including the anterior lens capsule and may progressively block the trabecular meshwork in the anterior angle. The characteristic appearance on the anterior lens capsule arises because of movement of the pupil (constriction and dilation), which scrapes the material off the midzone of the lens, leaving a clear zone.

SYMPTOMS

Usually asymptomatic.

SIGNS

PXF can only be readily observed with pupillary mydriasis and slit-lamp examination. White flaky material is seen on the lens capsule and pupillary border. The pseudoexfoliative material is located in a central disc and in a peripheral circular band, with a clear zone in between. It may be present bilaterally or unilaterally.

Gonioscopy commonly shows trabecular hyperpigmentation, and a flaky white appearance on the trabeculum. PXF may be sometimes associated with

pigment dispersion, with signs such as iris transillumination defect, Krukenberg spindle, and fine pigment granules on the anterior lens surface. There may be signs of glaucoma such as optic nerve cupping, glaucomatous visual field loss and an increased IOP. There is an increased likelihood of an IOP spike after mydriasis due to the compromised trabecular meshwork.

PREVALENCE

Uncommon to rare (approximately 1/1,000 to 1/10,000) and tends to affect the elderly. More common in Scandinavia, although the reason why is unclear.

SIGNIFICANCE

Pseudoexfoliation is a known risk factor for the development of open-angle glaucoma. It may also be associated with weakening of the zonules and capsule, which is of significance in cataract surgery.

DIFFERENTIAL DIAGNOSIS

Acute angle-closure glaucoma, Endophthalmitis, Cataract classification, Iritis.

MANAGEMENT

Additional investigations

Visual field testing and gonioscopy to determine other risk factors and whether glaucomatous field defects are present. IOP should be monitored post-pupil dilatation in these patients.

Topical medication

PXF does not in itself require therapy; however, treatment is required if there

are also signs of glaucoma. Medical treatment is the same as for primary open-angle glaucoma. Should pressure be initially high, then some immediate treatment guidelines are given under 'Acute angle-closure glaucoma'.

Laser surgery

Argon laser trabeculoplasty can be initially effective, more so than in primary open-angle glaucoma. However, the effectiveness of the treatment may diminish after a number of years. A further surgical treatment option is trabeculectomy.

Review

Many patients with pseudoexfoliation do not have glaucomatous signs. Such patients should be reviewed every six to 12 months, depending upon the presence of other risk factors such as a family history of glaucoma.

The full series of these articles will be available in the book *Posterior Eye Disease and Glaucoma A-Z* by Bruce AS, O'Day J, McKay D and Swann P. £39.99. For further information click on the Bookstore at opticianonline.net

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