SUMMARY

Introduction This is an observational case report presenting retinitis pigmentosa associated with pseudoexfoliative glaucoma.

Case outline A 69-year-old man presented with retinitis pigmentosa. On examination, pseudoexfoliative material was detected on anterior segment structures, and intraocular pressure was 26 mmHg in the right and 24 mmHg in the left eye. The patient was commenced on topical antiglaucomatous therapy (timolol + dorzolamide twice daily, latanoprost once in the evening) to both eyes.

Conclusion To the best of our knowledge, this is the first reported case of retinitis pigmentosa associated with pseudoexfoliative glaucoma. Although rare, retinitis pigmentosa and glaucoma can occur in the same eye.

Keywords: glaucoma; pseudoexfoliation; retinitis pigmentosa; intraocular pressure

INTRODUCTION

Retinitis pigmentosa (RP) is a group of inherited disorders in which abnormalities of the photoreceptors (rods and cones) or the retinal pigment epithelium lead to progressive visual loss. RP can be associated with a wide variety of ocular and systemic disorders: Weill–Marchesani syndrome, ectopia lentis, Fuchs’ heterochromic cyclitis [1–4]. Rarely, RP can be associated with various forms of glaucoma [3]. To the best of our knowledge, association of RP and pseudoexfoliative glaucoma (PXFG) has not yet been reported.

CASE REPORT

A 69-years-old man was referred to our glaucoma clinic for a consultation. He had a history of RP since his young age (teenage years). On examination, best-corrected visual acuity was 0.50/60 in the right eye, and hand movements in the left. Goldman applanation tonometry revealed intraocular pressure (IOP) of 24 mmHg in the right (RE) and 26 mmHg in the left eye (LE). Central corneal thickness (Palm Scan AP 2000, ophthalmic ultrasound, Micro Medical Devices Inc., Calabasas, CA, USA) was 556 μm in the right eye and 559 μm in the left. Pseudoexfoliative material was present on pupillary margin and anterior capsule of lens, bilaterally (Figure 1 and 2).

Gonioscopy demonstrated wide-open angles bilaterally, and heavily pigmented trabecular meshwork. Fundoscopy showed optic disc asymmetry with cup:disc ratios being 0.4 RE and 0.8 LE (Figure 3 and 4).

Standard automated perimetry was not possible due to poor visual acuity.

DISCUSSION

A diagnosis of PXFG was made, and the patient was commenced on topical antiglaucomatous therapy (timolol + dorzolamide twice daily, latanoprost once in the evening) to both eyes.
latanoprost once in the evening) to both eyes. The rationale for such an aggressive antiglaucoma therapy was poor visual acuity in both eyes. After three days, IOP had decreased to 16 mmHg (the right eye) and 18 mmHg (the left eye). Since satisfactory IOP reduction was accomplished with medication, no further therapeutic steps were taken (laser treatment or surgery).

RP is an inherited bilateral condition. Most cases are familial, inherited in a variety of ways, including dominant, recessive, and sex-linked recessive. Some cases are sporadic and lack family history of the disease, like the case we are presenting. According to available literature, the prevalence of primary open angle glaucoma in patients with RP ranges 2–12% [6]. Literature review shows association of RP with chronic angle-closure glaucoma, acute angle-closure glaucoma, and pigmentary glaucoma [7], but this is the first time that RP accompanied by PXFG is reported. In cases of RP associated with advanced glaucoma, we must emphasize the need for making an early glaucoma diagnosis, and almost aggressive glaucoma treatment in spite of poor visual acuity, as further deterioration of the visual field can significantly affect the quality of life of our patients.

To the best of our knowledge, this is the first reported case of retinitis pigmentosa associated with pseudoexfoliative glaucoma. Although rare, retinitis pigmentosa and glaucoma can occur in the same eye.

REFERENCES