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Impact Factor: 4.428

Disperse Pigmentation Syndrome and Available Treatments

Author Details: Duong Dieu MD, Ph.D
Vice Dean of Faculty of Medicine Nguyen Tat Thanh University-300A Nguyen Tat Thanh Street-HCM City- Vietnam. duongdieumd@gmail.com; duongdieumd@ntt.edu.vn.

Abstract
Excessive pigment liberation throughout the anterior segment/ iris of the eye is a sign of disperse pigmentation syndrome (DPS). Patients with disperse pigmentation syndrome and intraocular pressure can be transferred to pigmentary glaucoma (PG) causing optic damage, so it should be treated early. Examination of the peripheral retina in patients with DPS and PG is very important to detect degeneration requiring treatment. The first choice in medical treatment is acetazolamide which does not cause spasms. Anti-virus drugs were used if zona or herpes clinical signs were seen. Surgical treatment should be done in the case really needed with intraocular not normalizing for a long time as well as the cause of PG. Disperse pigmentation syndrome with available treatments and some consideration on classification will noted in this review.
Key words: *Pigmentation syndrome, pigmentary glaucoma, Dapiprazole, YAG laser, retinal detachment.*

1. Introduction:

Excessive pigment liberation throughout the anterior segment/ iris of the eye is a sign of DPS. Patients with disperse pigmentation syndrome (DPS) and intraocular pressure can be transferred to pigmentary glaucoma (PG) and causing optic damage, so it should be treated early. [1] Examination of the peripheral retina in patients with DPS and PG is very important to detect degeneration requiring treatment. The first choice in medical treatment is acetazolamide which does not cause spasms. Anti-virus drugs were used if zona or herpes clinical signs were seen Surgical treatment should be done in the case really needed with intraocular did not normalize for a long time as well as the cause of PG [1, 2, 3]. Disperse pigmentation syndrome with available treatments and some consideration on classification will noted in this review.

2. Classification:

Disperse pigmentation syndrome (DPS) and pigment glaucoma (PG) mainly affect near-sighted young people [1][2][3]. Scrubbing of the iris causes pigment dispersion and blockage of the beige area. Pigment accumulation causes transient glaucoma due to uncontrolled disperse pigmentation. The percentage of diffusion pigmentation syndrome to pigment glaucoma is about 20%. The transition from pigment dispersion to pigment glaucoma is often glaucoma and nearsightedness. In the treatment of pigment glaucoma acetazolamide that is an effective carbonic anhydrase inhibitor is first used. circumcision reduced The incidence of glaucoma in dispersion pigmentation syndrome is reduced with YAG laser although results are less published for those over 40 years of age. Reticular degeneration is found in approximately 33% of eyes with dispersion pigmentation syndrome [1,2,3].

In diffuse pigmentation syndrome, the iris bulges in the peripheral part against the iris ligament can cause transient glaucoma, associated with dilated pupils. Many phagocytic cells migrate to the raft area and damage the raft cells. A secondary increase in pressure in the anterior lens is the possibility of an increase in anterior chamber pressure. For prevent the iris from changing with regulation a peripheral iridectomy can be done.

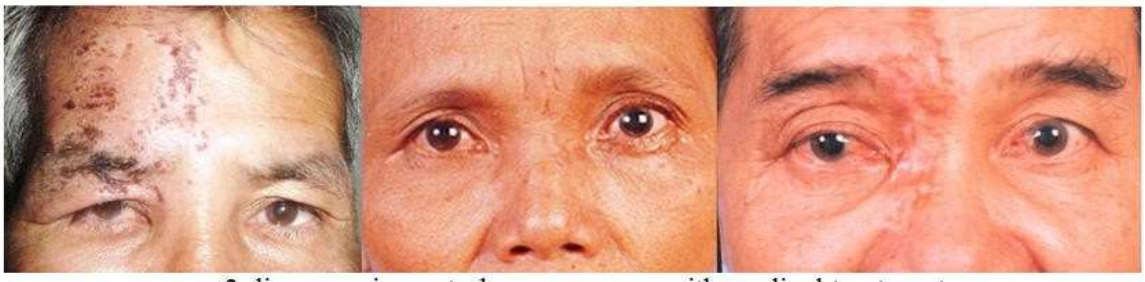
The patients with DPS will know progress later to glaucoma through classification. For these patients to prevent the iris contacting with the ligament or by the circumference of the iris. A combination of iris shrinkage and

retinal detachment treatment is also known in patients with macular degeneration. Minimize retinal vitreous shrinkage on the peripheral retina and do not cause myopia, making dapiprazole an attractive new drug [3].

According to Mastropasqua et al.among 70 patients, there are one hundred and four eyes from DPS to the PG after 82.6 month follow-up.
Use the following classification:
Stage 0: Bulging iris
Stage 1: Bulging iris + pigment granules on the iris or anterior lens, dilated pupil, anterior chamber pigment
Stage 2: Bulging iris + corneal pigment, eye pressure> 21mmHg, normal vision Stage 3: Vision: damage, glaucoma pigment
About 20% of DPS progresses lead to pigment glaucoma. Usually occurs at the age of 30-40 or older. The pigment glaucoma (PG) is more common in high myopia and low age. 85.8% of PG occurred within 10 years with STIs. On the other hand, 10 years after STST without vision damage, there is less risk of PG. Glaucoma is the most important risk factor when switching from DPS to PG. It was found that nearsightedness and glaucoma are the risks of converting DP to PG. Anti-glaucoma therapy in these patients are indicated.

3. Treatment:

3.1 Medical treatment [3.4,5]: The pupil-contraceptive reduces iris friction and reduces pigmentation in rafts. The increased regulation spasms and blurred vision in young people who is less tolerated. Mastropasqua et al. evaluated the effect of dapiprazole in 3 eyes of myopia on DPS. The blurred vision and light rings are often seen. For lowering peak intraocular pressure and increasing external circulation during exercise dapiprazole is effectively used. Half of the patients with PG were treated with 0.5% dapiprazole small 3 times a day in combination with 0.5% timolol equivalent to 0.5% timolol 2 times a day with pilo 1% 3 times a day. There was no difference in both cases treated after 3 months of follow-up. After 12 months, there was a difference in intraocular pressure and increased outflow. The author believes that dapiprazole prevents friction and reduces disperse pigment glaucoma (DPG). After 3 months the rafting area is clear. The intraocular pressure was reduced by prostaglandins analog, latanoprost, that were increasing scleroderma. If there is hyperpigmentation iris, latanoprost is also unknown. Patches of pigmentation in the raft can be washed surgically. Rinsing the raft area increases the outflow and reduces the patient's eye pressure with PG. Anti-virus drugs were used if zona or herpes clinical /paraclinical signs were seen.

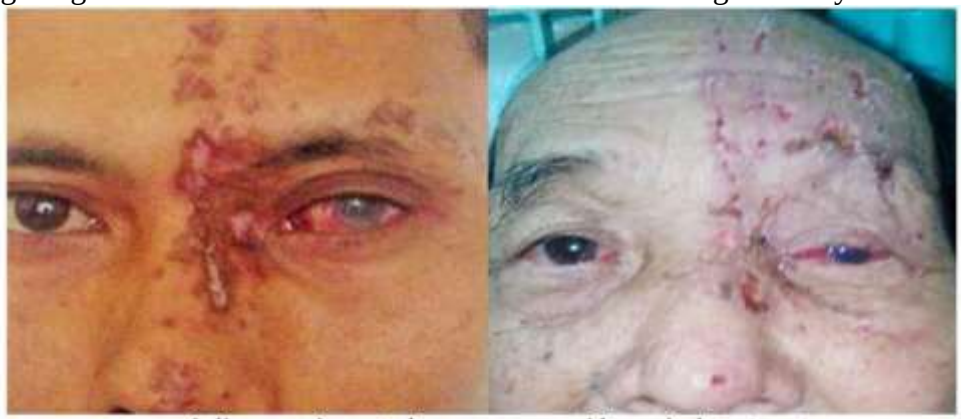


3 disperse pigment glaucoma cases with medical treatment

3.2 Surgical treatment: Peripheral Iridectomy [3,4,5,6]: Gandolfi and Vechi reported that after a peripheral iridectomy with a YAG laser on the DPS eye was low, stable intraocular pressure. There are 21 people with bipedal DPS with one eye having YAG laser and the other eye was a control group. There were 11 eyes (52.3%) untreated and 1 eye (4.7%) of treatment with increased eye pressure> 5mmHg after 2 years of follow-up. Peripheral iridectomy on patients above 40 years of age is highly effective. According to this study, young people with DPS are most beneficial with YAG laser iridectomy. If you lower your eye pressure to reduce the main risk of PG, this is an indication but there is much more to know about this technique such as vitiligo complications.

The retinal detachment and degeneration are related to myopia with DPG. Scuderi et al. noted that 24 white patients with DPG and PG occupied 33% mesh degeneration frequency. The refractive index of this group is +2.5 to - 12. The author stated that there is a close correlation between pigmentary retinitis and retinal

degeneration. The hereditary can be cause of DPG, near- sightedness, and retinal degeneration. Chromosome 7q 35-q36. is related to DPG[3]. For reduce iris friction the cholinergic vasoconstrictor is used. In retinal vascular degeneration, a combination of vasoconstriction and retinal detachment therapy is also known. According to the Mayo Clinic, evidence from clinical trials shows that treatment with steroids tends to be more successful than treatment with antivirals In the case of PG by the virus the radical treatment is the first choice. In the case of ocular hypertension, surgical glaucoma should be done be not restored according to Henry Saraux. [4, 5, 6].



2 disperse pigment glaucoma cases with surgical treatment

4. Prognosis:

There is rare blindness from PG. Risk factor for progression has not been identified other than elevated intraocular pressure. PG may regress over time in some cases. Pigmentation on the trabecular meshwork (TM) and transillumination iris defects have been observed to normalize over time. In the case of IOP has been normalized, suggesting a return of normal TM function. So, a diagnosis of normal-tension glaucoma in older patients has been revised. The iris transillumination defects and dense TM pigmentation are risk factors for PG. In such cases, The "pigment reversal sign" can be differentiated from other types of glaucomas in these cases [3]. **Conclusion:**

Examination of the peripheral retina in patients with DPS and PG is very important to detect degeneration requiring treatment. Medical treatment is the first choice for patients with DPS before switching to PG and causing optic damage. In the case of PG by the virus, radical treatment is needed. Surgical treatment should be done in the case really needed with intraocular not normalizing for a long time as well as the cause of PG.

Declaration of Interests: The author states that he has no conflicts of interest to declare Declaration of Interests: The author states that he has no conflicts of interest to declare

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