

정상안압녹내장의 치료

Treatment of Normal - tension Glaucoma

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Abstract

Normal tension glaucoma (NTG) is a disorder showing the characteristic optic nerve head damage and visual field defect with a normal intraocular pressure (IOP) and open anterior chamber angle, without any other disorders that may induce a damage to the optic nerve head and visual field. A disturbance in the vascular supply to the optic nerve head is thought to be the main etiologic factor in this disorder. A thirty percent reduction of IOP from the baseline can delay or prevent the disease progress of glaucoma, and the treatment of NTG is focused on relieving any vascular disturbance to the optic nerve head and reducing IOP. The target pressure in NTG should be individualized in each patient by age, presence of any systemic vascular disorder, the degree of optic disc damage, and response to anti - glaucoma medications. It should also be carefully and regularly re - evaluated during follow - up. Since most patients with NTG are old, the selection of anti - glaucoma medication needs a careful consideration of the systemic status of the patient. Pilocarpine effectively reduces IOP, but has limitations from side effects including miosis. Non - selective beta - blocking agents may induce serious systemic side effects and can reduce the perfusion pressure to the optic nerve head. Brimonidine reduces the aqueous inflow, increases the uveoscleral outflow, and is known to have a potential neuroprotective effect. Betaxolol and dorzolamide are known to increase the ocular blood flow and have a protective effect from optic nerve damage. Oral carbonic anhydrase inhibitor may be effective, if systemic adverse effects can be tolerated. Prostaglandins may reduce IOP below the level of episcleral venous pressure, but their long - term side effects have not been fully evaluated to date. Laser trabeculoplasty can reduce IOP, but not sufficiently in many instances. To reduce IOP sufficiently enough to halt the progression of glaucoma, filtering surgery assisted by mitomycin - C and 5 - FU may be recommended, when the IOP reduction is not satisfactory with anti - glaucoma medications.

Keywords : Normal - tension glaucoma; Medical treatment; Laser treatment; Filtration surgery

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21mmHg , 가 ,
(6).
가
가 가
가 (7).
,
가
(1).
6.7% 68.3% , 가
가
(2).
가
(日差變動)
3~6mmHg가
가
가
30%
hemodynamic crisis 가 가
가 ,
vasospastic event ,
가 , 가
가 (3~5).
가

(11)

dorzolamide

가 (12).

(9).

, 30%

가 calcium channel blocker

(13) 가 14 18mmHg
Mitomycin - C 5 - FU

가
30%
Mitomycin - C 5 - FU

(10) 가

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