

Latanoprost: Its Use in ACG and Asia

To date, there has been almost no doubt about the efficacy of latanoprost as a potent ocular hypotensive agent in open angle glaucoma (OAG) and ocular hypertension. Several clinical studies have confirmed that once daily treatment of latanoprost 0.005% is equal or superior to conventional treatment with timolol 0.5% twice daily.¹⁻⁵ The drug does not have any apparent systemic side effects in terms of cardiovascular and pulmonary function. It is well tolerated locally, except for a unique side effect of increased iris pigmentation,^{1-3,5} and there is a possible association with some forms of ocular inflammation.^{6,7} The intraocular pressure (IOP) lowering effect seems to be well maintained over a 24-month period and remains almost constant.⁸ Most of the information on latanoprost has been obtained from 3 large European and US clinical studies.¹⁻³ Little is known about its effects in Asians, except for results from a clinical study in Japan.⁴ But why should more attention not be paid to other parts of Asia? Almost half of the people in the world who have become blind through glaucoma are living in Asia,⁹ and it is likely that other Asian groups will benefit equally from the drug. There is a need for clinical studies to verify the efficacy in Asian groups. In this issue, Dr Aquino has significantly contributed to this important task by comparing the IOP lowering effect of latanoprost with timolol in OAG and ocular hypertension.

Glaucoma is a major cause of irreversible blindness in Asia. According to the WHO figures, glaucoma accounts for approximately 20% of blindness in Asia.⁹ Thus, it is affecting Asia on a large scale, with both health and economic impacts. Based on epidemiological surveys, angle closure glaucoma (ACG) is the more common type of glaucoma affecting East Asian, particularly Chinese, racial groups.¹⁰ Therefore, any new anti-glaucoma drug which is introduced into Asia must be challenged on its efficacy in ACG. To date, limited knowledge on the efficacy of latanoprost in ACG is documented. Ophthalmologists in Asia need to investigate such issues as the safety profile of latanoprost in our population. Initial experience of latanoprost as an additive medication for chronic ACG has demonstrated satisfactory responses. Further IOP reduction of 15.2-29.6% in a group of 21 patients with chronic ACG was observed in a 3-month follow-up study (Rojanapongpun P, written communication). The efficacy of latanoprost as monotherapy in ACG was confirmed in a prospective, randomised comparison with timolol (Chew P, personal communication). More studies will be undertaken to help us understand more about the role of latanoprost in treating ACG, including comparative studies with other medications in its class and agents in other classes. In this issue, Ritch and Liebmann review the current knowledge on ACG.

Individual responsiveness to latanoprost is an important issue, as this can vary widely in both the magnitude and rapidity of response. Personal experience has indicated that some patients may respond to latanoprost in a rapid and dramatic fashion while others are slow or even non-responders. Why one patient responds well and another does not remains to be elucidated. Further investigations are needed to help elucidate the pharmacokinetic profile. A once-daily regimen of latanoprost is of great advantage for our patients and helps physicians to overcome the compliance problem. In Asian cultures, where the younger generation look after their elderly parents, this feature may be extremely useful. Many elderly glaucoma patients who are likely to forget to take their drops or not be able to take drops regularly by themselves can be helped by their children. The convenient dosing, good local tolerability, systemic safety, together with its efficacy are likely to make latanoprost a new first-line drug of treatment for glaucoma. But Asia has unique problems in terms of different forms of glaucoma and fragile economies that might dictate which anti-glaucoma medication should be used first. Although latanoprost is commercially available in most parts of Asia, it is relatively expensive when compared with topical β -blockers and other available medications. Because of the current economic situation in Asia, latanoprost may not be the primary drug, except for patients with systemic risks or complications from β -blockers or compliance problems. Some patients will benefit from its superior efficacy and relative safety, but until the cost issue is resolved by each nation's policy on reimbursement or by market forces, together with more experience in its use by local ophthalmologists in other forms of glaucoma, latanoprost will be reserved as add-on therapy in most of Asia.

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