

Clinical Experience in the Treatment of Normal Tension Glaucoma with Latanoprost in Germany

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ABSTRACT

Aims: The aim of this analysis was to evaluate the general ophthalmologist's experience in using latanoprost to treat normal tension glaucoma (NTG) patients.

Methods: NTG patients included in this study were part of an observational cohort of patients that were changed from previous therapy to latanoprost in Germany.

Results: This study included 200 NTG glaucoma patients who were being treated with latanoprost monotherapy (average duration, 1.2 ± 1.4 years) and had 6 months of follow-up. At the beginning of the observation period, patients had an average intraocular pressure (IOP) of 15.2 ± 2.5 mmHg and after 6 months, 15.0 ± 2.4 mmHg ($P = 0.769$). Eight (8) patients (4.0%) were discontinued from latanoprost during the observation period, with the most common reason noted as the need for further IOP reduction ($n = 7$; 3.5%). Twenty-four (24) patients (12.0%) noted at least one ocular adverse event during the observation period, with the most common reason noted as burning/stinging ($n = 9$; 4.5%) or conjunctival hyperemia ($n = 9$; 4.5%).

Conclusions: This study suggests that patients with NTG who are already treated with latanoprost monotherapy should continue to have, over a short-term follow-up, generally stable IOPs, low side-effect incidence, and discontinuations, as well as "very good" to "excellent" physician ratings of patient efficacy, tolerability, and satisfaction.

INTRODUCTION

LATANOPROST 0.005% (Xalatan™, Pfizer, New York, NY) is an F_{2α} prostaglandin analog, which is commonly used for the treatment of ocular hypertension and primary open-angle glaucoma (POAG). Latanoprost has been shown to reduce intraocular pressure (IOP) by 27%–35% in regulatory clinical trials.^{1–3} In normal tension glaucoma (NTG) in Western countries, however,

less is known regarding the efficacy of latanoprost. Several short-term studies (<1 month) have demonstrated that latanoprost, in 68 NTG patients, reduced the pressure by 15%–21%.^{4–6} More recently, Ang and associates showed an average diurnal IOP decrease of 17% in 25 patients who were treated over 6 months.⁷ Whereas the short-term benefit of latanoprost on IOP has been demonstrated in NTG patients, treatment must be long term. Unfortunately, little is known about

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the effect of latanoprost in routine clinical practice in the longer term treatment of NTG.

The aim of this analysis was to evaluate the general ophthalmologist's experience in using latanoprost to treat NTG patients. This study included 352 private office-based German ophthalmologists, who collected efficacy, safety, tolerability, and satisfaction data in a prospective observational cohort in treated ocular hypertension or glaucoma patients. This type of study is legally classified in Germany ("Anwendungsbeobachtung") as a method to collect observational data to help understand clinical outcomes.

METHODS

This analysis included 200 NTG patients who were being treated already with latanoprost monotherapy (average duration, 1.2 ± 1.4 years). In addition, they must have had at least 6 months of follow-up during the study (average follow-up, 1.8 ± 1.0 years; range, 6 months to 4 years) on latanoprost monotherapy.

RESULTS

The patient sample included 121 females (60.5%) and 79 males (39.5%). The average age was 68.0 ± 11.1 years. At the beginning of the observation period, patients had an average IOP of 15.2 ± 2.5 mmHg and after 6 months 15.0 ± 2.4 mm Hg ($P = 0.769$). The physician assessments of efficacy, tolerability, and satisfaction are shown in Table 1.

Eight (8) patients (4.0%) were discontinued from latanoprost during the observation period. The most common reason noted was the need for further IOP reduction ($n = 7$, 3.5%). Twenty-four (24) patients (12.0%) noted at least 1 ocular ad-

verse event during the observation period. The most common reason was burning and stinging ($n = 9$; 4.5%) or conjunctival hyperemia ($n = 9$; 4.5%).

DISCUSSION

Long-term (>1 year) persistency rates (rate of unchanged initial therapy) of glaucoma have been evaluated in several studies.⁸ Day and associates showed, in 1182 patients, that the discontinuation rates were statistically less for latanoprost, being approximately 25%, versus 35% for timolol and 40% for bimatoprost over 1 year. Patients who discontinued their medicine typically did so within the first 3 months of therapy.⁸ Further, Diestelhorst and coauthors noted, in 260 patients, that they were almost four times more likely to discontinue timolol as latanoprost over 2 years.⁹

In this study, the average time of latanoprost treatment prior to our study was 1.2 ± 1.4 years, and the average treatment within the study was 1.8 ± 1.0 years, providing a total of approximately 3.0 years of latanoprost therapy. Accordingly, the current study, and the Day and associates study taken together, might suggest that if a NTG patient tolerates latanoprost over the short term following the initiation of therapy they would likely be able to continue latanoprost over the next several years.⁸ Further, if a NTG patient is examined during follow-up, some time after initiating latanoprost, they should have a low rate of discontinuation over at least the next 6 months.

CONCLUSIONS

This study indicates that patients with NTG, already treated with latanoprost monotherapy, should continue to have, over the short term, a follow-up with generally stable IOPs, a low incidence of side-effects and discontinuations, as well as "very good" to "excellent" physician ratings of patient efficacy, tolerability, and satisfaction.

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TABLE 1. PHYSICIAN ASSESSMENT OF EFFICACY, TOLERABILITY, AND SATISFACTION WITH LATANOPROST MONOTHERAPY, NUMBER OF PATIENTS (%)

	<i>Efficacy</i>	<i>Tolerability</i>	<i>Satisfaction</i>
Excellent	18 (9.0)	17 (8.5)	15 (7.5)
Very good	122 (61.0)	129 (64.5)	121 (60.5)
Good	56 (28.0)	52 (26.0)	63 (31.5)
Satisfactory	4 (2.0)	2 (1.0)	1 (0.5)
Unsatisfactory	0 (0)	0 (0)	0 (0)

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