Original Research Article

The Outpatient Prescribing Pattern of Olopatadine in Al Saih

ABSTARCT

Aim: This study was conducted to demonstrate the prescribing pattern of olopatadine eye drops in Al Saih.

Methodology: This is a retrospective study includes evaluating outpatient prescribing of olopatadine eye drops from 1st of January 2018 to 30th of June 2018 in a public hospital in Alkharj

Results: More than half of the patients who used olopatadine eye drops were females (56.00%). The age of 28.00% of them was between 50 and 59 and the age of 26.67% of them was between 40 to 49 years. More than half of the patients received olopatadine eye drops for 1 month (54.67%). Most of the prescriptions were written by ophthalmology department (96.00%).

Conclusion: Olopatadine eye drops prescribing was infrequent in Al Saih due to the availability of other alternatives. Further studies are needed to investigate the prescribing of olopatadine eye drops and its alternatives by the outpatient settings.

Keywords: Eye drops, olopatadine, outpatient, use.

INTRODUCTION

Ophthalmic antihistamines are eye drops or gels that have been specifically made to be administered into or around the eye and contain antihistamine drug. Olopatadine antihistamine is one of the mast cell stabilizers that block histamine release from histamine-1 receptors and prevent eye itching [1,2]. Olopatadine ophthalmic is an eye drops that is used to manage itching of the eye caused by a condition known as allergic conjunctivitis. This medication is also used to manage eye itching or redness caused by pollen, grass, ragweed, animal hair, or dander. It works by preventing the effects of certain inflammatory substances, which are produced by cells in your eyes and sometimes cause allergic reactions [3].

The use of Olopatadine could cause numerous side effects. The most common side effects for its use are headache, sore throat, and runny or stuffy nose [3]. Among 1680 patients who used olopatadine one to four times daily in both eyes for up to four months as monotherapy or adjunctive therapy to loratadine 10 mg in clinical studies, nearly 4.5% of patients can be expected to experience adverse reactions associated with olopatadine use but only 1.6% of those patients discontinued from the clinical studies due to these adverse reactions [4]. Moreover, no serious ophthalmic or systemic adverse reactions related to olopatadine were reported in clinical studies [4].

It is important to explore the factors that affect physicians' prescribing patterns in order to promote the rational use pattern and to improve the prescribing quality. It is important also to explore the frequency of using different medications such as olopatadine. So, this study was conducted to demonstrate the prescribing pattern of olopatadine eye drops in Al Saih.

METHODOLOGY

This is a retrospective study includes evaluating outpatient prescribing of olopatadine eye drops from 1st of January 2018 to 30th of June 2018 in a public hospital in Alkharj, that is a city in Saudi Arabia that include 425,300 persons.

The inclusion criteria include the prescriptions that contain olopatadine eye drops during the study period and the exclusion criteria include the prescriptions before 1st of January 2018 or after 30th of June 2018 and the prescriptions that didn’t contain olopatadine eye drops.

The data include personal information, prescribing months, duration of use, the level of prescribers, and the prescribing departments. The data were collected and analyzed using excel sheet and the descriptive data were represented as percentages and frequencies.

This study was approved by the ethical committee of Ministry of Health with IRB Log No: 20-131E

RESULTS and DISCUSSION

Olopatadine eye drops were prescribed for 75 patients during the study period. More than half of these patients were females (56.00%). The personal data of the patients are shown in table 1.

Table 1. The personal data of the patients.

Variable	Category	Number	Percentage
Gender	Female	42	56.00
	Male	33	44.00
Age	Less than 10	10	13.33
	10-19	8	10.67
	20-29	2	2.66
	30-39	4	5.33
	40-49	20	26.67
	50-59	21	28.00
	60-69	5	6.67
	More than 69	5	6.67
Nationality	Saudi	62	82.67
	Non- Saudi	13	17.33

The number of olopatadine eye drops prescriptions that were prescribed in different months of the study is shown in table 2. About 24.00% of the prescriptions were prescribed in March and 22.67% of the prescriptions were prescribed in February.

Table 2. The number of olopatadine eye drops prescriptions that were prescribed in different months.

Month	Number	Percentage
January	7	9.33
February	17	22.67
March	18	24.00
April	14	18.67
May	15	20.00
June	4	5.33

Table 3 shows the duration of using olopatadine eye drops. More than half of the patients received olopatadine eye drops for 1 month (54.67%).

Table 3. Duration of using olopatadine eye drops.

Duration	Number	Percentage
10 Days	26	34.67
1 Month	41	54.67
2 Months	8	10.66

Table 4 shows the level of prescribers who prescribed olopatadine eye drops. Most of the prescriptions were written by residents (94.67%).

Table 4. The level of prescribers.

Prescribers Level	Number	Percentage
Specialist	4	5.33
Resident	71	94.67
Consultant	0	0.00

Table 5 shows the departments that prescribed olopatadine eye drops. Most of the prescriptions were written by ophthalmology department (96.00%).

Table 5. The departments that prescribed olopatadine eye drops.

Department	Number	Percentage
Ophthalmology	72	96.00
Emergency	3	4.00
Total	75	10.00

Olopatadine eye drops prescribing was infrequent in Al Saih. This could be due to the availability of several alternatives such as Alcaftadine, Azelastine, Bepotastine, Emedastine, Epinastine, and Ketotifen [5]. Banerjee et al reported that amongst the medications that were prescribed in ophthalmology outpatient department of a medical college in India, antimicrobials were the most commonly prescribed agents (36.4%) followed by anti-inflammatory and anti-allergic drugs (24.2%), and anti-glaucoma medications (21.4%) [6]. Ahmed showed that medication prescribing by ophthalmic outpatient department was uncommon and that the most commonly prescribed drugs in outpatient ophthalmology department were artificial tears, olopatadine, fusidic acid, and fluorometholone [7].

More than half of the patients received olopatadine eye drops for 1 month in the present study. The usual dose of patanol eye drops is one to two drops in the affected eyes twice each day for up to 14 weeks [8]. European Medicines Agency informed that olopatadine can be used for up to four months if needed [9].

In clinical studies involving 1680 patients, olopatadine was administered for up to four months as monotherapy or adjunctive therapy to loratadine 10 mg and that approximately 4.5% of patients can be expected to experience adverse reactions associated with the usage of olopatadine; nonetheless, only 1.6% of patients discontinued from the clinical studies due to these adverse reactions [4]. Corum et al stated that 2 months' treatment with olopatadine hydrochloride 0.1% relieves the signs and symptoms of vernal keratoconjunctivitis [10].

CONCLUSION

Olopatadine eye drops prescribing was infrequent in Al Saih due to the availability of other alternatives. Further studies are needed to investigate the prescribing of olopatadine eye drops and its alternatives by the outpatient settings.

COMPETING INTERESTS DISCLAIMER:

Authors have declared that no competing interests exist. The products used for this research are commonly and predominantly use products in our area of research and country. There is absolutely no conflict of interest between the authors and producers of the products because we do not intend to use these products as an avenue for any litigation but for the advancement of knowledge. Also, the research was not funded by the producing company rather it was funded by personal efforts of the authors.

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