

Topical Hydrocortisone Use in the Outpatient Department

ABSTRACT

Aim: This study aimed to describe the use of topical hydrocortisone in the outpatient department in Alkharj.

Methodology: This was a retrospective study that included reviewing the electronic prescriptions of topical hydrocortisone among outpatients in Alkharj. The inclusion criteria included all of the outpatient prescriptions that contained topical hydrocortisone in the study period.

Results: During the study period between January 2018 to June 2018, 196 patients received topical hydrocortisone. More than 52% of the patients were males and the age of 31.63% of them was less than 10 years. Most of the patients received topical hydrocortisone as a cream (87.76%). Most of the prescriptions that contained topical hydrocortisone were written by residents (98.98%) and most of the prescriptions that contained topical hydrocortisone were written by emergency department (70.41%).

Conclusion: The present study showed that topical hydrocortisone was prescribed commonly in the outpatient setting. More studies are needed to explore the frequency of topical hydrocortisone prescribing in other settings and to explore the frequency of using other topical medications in different settings.

Keywords: Corticosteroids, hydrocortisone, outpatient, topical, use.

INTRODUCTION

Topical corticosteroids are a type of steroid medications applied directly to the skin to decrease inflammation and irritation [1]. They are available in numerous forms including lotions, creams, gels, ointments, mousses, solutions, tapes and bandages [1]. They are available in 4 different strengths; mild, moderate, potent, and very potent [1]. hydrocortisone skin cream and hydrocortisone for piles and itchy bottom are examples for mild corticosteroids [1].

Hydrocortisone reduces the swelling, redness, and itching that can occur in different conditions [2]. It can help with the symptoms of eczema, contact dermatitis, psoriasis, prickly heat rash, nappy rash, and insect bites and stings [3]. Topical hydrocortisone is available dosage forms such as topical gel, topical cream, topical kit, topical lotion, topical solution, topical ointment, topical spray, and topical stick [4]

Topical hydrocortisone may cause side effects such as burning, irritation, itching, redness, dryness of the skin, acne, skin color changes, unwanted hair growth, small white or red bumps on the skin, tiny red bumps, and rash around the mouth [5]. The long term or incorrect use of topical steroids can result in the development of rebound flares after stopping treatment (withdrawal syndrome). A severe form of rebound flare can develop which takes the form of a dermatitis with intense redness, burning, and stinging that can spread beyond the initial treatment area [6]. Medicine used on the skin such as topical hydrocortisone is not likely to be affected by other medications but some drugs can interact with topical medications [4,7].

The study of prescribing pattern is vital because it gives an idea to the physicians about the monitoring and the assessment of the medicines and endorses the needed modifications [8]. This study aimed to describe the use of topical hydrocortisone in the outpatient department in Alkharj.

METHODOLOGY

This was a retrospective study that included reviewing the electronic prescriptions of topical hydrocortisone among outpatients in Alkharj. The inclusion criteria included all of the outpatient prescriptions that contained topical hydrocortisone in the study period. Exclusion criteria include the inpatient prescriptions in addition to the outpatient prescriptions that didn't contain topical hydrocortisone.

The collected data included the demographic data of patients, the number of topical hydrocortisone prescriptions that were prescribed during different months of the study, duration of topical hydrocortisone use, the departments that prescribed topical hydrocortisone, the prescribed dosage forms of topical hydrocortisone, and the level of prescribers who prescribed topical hydrocortisone.

The data were collected and analyzed by Excel spreadsheet and the descriptive data were represented in several tables as percentages and frequencies.

Results and Discussion

During the study period between January 2018 to June 2018, 196 patients received topical hydrocortisone. More than 52% of the patients were males and the age of 31.63% of them was less than 10 years. 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	93	47.45
	Male	103	52.55
Age	Less than 10	62	31.63
	10-19	31	15.82
	20-29	36	18.37
	30-39	29	14.80
	40-49	15	7.65
	50-59	13	6.63
	60-69	7	3.57
	More than 69	3	1.53
Nationality	Saudi	158	80.61
	Non- Saudi	38	19.39

Table 2 shows the number of prescriptions that were prescribed during the study and that contained topical hydrocortisone. More than 21 % of the prescriptions were prescribed in June.

Table 2. The number of prescriptions that were prescribed during the study.

Month	Number	Percentage
January	28	14.29
February	29	14.80
March	29	14.80
April	40	20.41
May	27	13.78
June	43	21.94

Table 3 shows the duration of topical hydrocortisone use. More than 25% of the patients used topical hydrocortisone for 1 week and 19.38% of them used topical hydrocortisone for 5 days.

Table 3. The duration of topical hydrocortisone use.

Duration	Number	Percentage
1 Day	1	0.51
2 Days	1	0.51
3 Days	34	17.35
4 Days	14	7.14
5 Days	38	19.38
1 Week	50	25.51
10 Days	6	3.06
2 Weeks	26	13.27
15 Days	2	1.02
1 Month	18	9.18
2 Months	4	2.04
More than 2 Months	2	1.02

Table 4 shows the level of prescribers. Most of the prescriptions that contained topical hydrocortisone were written by residents (98.98%).

Table 4. The level of prescribers.

Prescribers Level	Number	Percentage
Specialist	2	1.02
Resident	194	98.98
Consultant	0	0.00

Table 5 shows the prescribed dosage forms of topical hydrocortisone. Most of the patients received topical hydrocortisone as a cream (87.76%).

Table 5. The prescribed dosage forms of topical hydrocortisone.

Dosage form	Number	Percentage
Cream	172	87.76
Ointment	24	12.24

Total	196	100
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Table 6 shows the departments that prescribed topical hydrocortisone. Most of the prescriptions that contained topical hydrocortisone were written by emergency department (70.41%).

Table 6. The departments that prescribed topical hydrocortisone.

Department	Number	Percentage
Dermatology	43	21.94
Emergency	138	70.41
E.N.T	1	0.51
Surgery	7	3.57
Nephrology	6	3.06
Pediatrics	1	0.51

The use of topical hydrocortisone was common in the outpatient department in Alkharj. In general, the use of topical steroids is common specially creams and lotions dosage forms [9]. For example, topical steroid is used when one or more patches of eczema flare up to clears this flare up [10]. Hydrocortisone cream is one of the steroids that is a commonly and is classed as a mild topical steroid [10]. Similarly, Ference and Last reported that the use of topical steroids is common but evidence of effectiveness exists only for select conditions, such as psoriasis, eczema, vitiligo, atopic dermatitis, acute radiation dermatitis, phimosis, and lichen sclerosus [11].

More than 44% of the patients used topical hydrocortisone for 1 week or for 5 days. The duration of treatment depends on the intensity and the type of the lesion; it is also guided by response to treatment [12]. For treating mild inflammatory skin conditions, a course of treatment of up to seven days is usually sufficient [13]. Most of the patients only need to use this medicine for 1 to 2 weeks and sometimes the doctor may suggest using it less frequently over a longer period of time [1]. In general, topical corticosteroids should be used for a short duration not more than 2 to 4 weeks, regardless of corticosteroids potency [14].

Most of the prescriptions that contained topical hydrocortisone in the present study were written by emergency department or by dermatology department. this is rational because it reduces the itching, swelling, and redness that occur in different conditions such as psoriasis, eczema, contact dermatitis, nappy

rash, prickly heat rash, and insect bites and stings. These conditions are common among the patients who visit emergency and dermatology departments.

CONCLUSION

The present study showed that topical hydrocortisone was prescribed commonly in the outpatient setting. More studies are needed to explore the frequency of topical hydrocortisone prescribing in other settings and to explore the frequency of using other topical medications in different 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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