Original Research Article

The Prescribing of MEBO Ointment in a public hospital in Alkharj.

ABSTRACT

Aim: The present study aimed to describe the prescribing of moist exposed burn ointment (MEBO) in Alkharj.

Methodology: This is a retrospective study that includes reviewing the electronic prescriptions that included MEBO among the patients who received medications from the outpatient department in a public hospital in Alkharj.

Results: More than 61% of the patients who received MEBO ointment were female patients and about 61.98 % of them received MEBO ointment for 1 week. Most of the prescribers were residents (76.86%). More than 46% of the prescriptions were prescribed by emergency department, about 24% were prescribed by plastic surgery department.

Conclusion: The use of MEBO ointment in the outpatient setting in Alkharj was uncommon. Further studies are needed to explore the pattern of using burn treating ointments such as MEBO ointment in the outpatient setting and in other settings.

Keywords: Burn ointment, MEBO, outpatient, use.

INTRODUCTION

Burn injury is a worldwide problem that equally concerns developed, under-developed, and developing countries. Even after the advances in burns′ care, the selection of the most suitable dressing material for burns is still elusive [1]. The use of silver sulfadiazine for treating burns has remained the standard management of partial-thickness burn wounds for more than four decades but it causes several adverse effects such as local skin reaction, painful dressing changes, hypersensitivity reactions and occasionally self-limiting leucopenia [1]. One of the main alternative agents for treating the burn is moist exposed burn ointment (MEBO) [1].

MEBO is an oil-based herbal ointment, purported to be efficacious in managing burn wounds and more frequently used in the Middle East and in Asia [2]. It is a Chinese burn ointment with a USA patented formulation, has been reported to promote chronic ischemic and neurogenic ulcer healing in patients [3]. MEBO is natural in origin and containes beta-sitosterol, Scutellaria baicalensis, Phellodendron amurense, Coptis chinensis, Beeswax, Pheretima aspergillum, and sesame oil [4].

Beta-sitosterol has been shown to have anti-inflammatory effects, [5] and berberine has antimicrobial effects [5]. Numerous studies have confirmed the rapid, healing of MEBO in acute and chronic wounds [6,7].

Using MEBO could cause some side-effects that may occur from all constituting ingredients of Mebo Burn Ointment. Such as skin rashes, diarrhea, and hair loss [8]. Li et al stated that that MEBO is an effective and safe therapy for treating pressure ulcers in Chinese patients but larger studies conducted over a longer treatment period are still needed [9].

There is a lack in studies about the frequency of using MEBO and other medications that is used for the treatment of burn wounds. So, the present study aimed to describe the prescribing of Mebo cream in Alkharj.

METHODOLOGY

This was a retrospective study that included reviewing the electronic prescriptions that included MEBO ointment among the patients who received medications from the outpatient department in a public hospital in Alkharj. The inclusion criteria included outpatient prescriptions that contained MEBO ointment during the study period. The outpatient prescriptions that didn't contain MEBO ointment and the inpatient prescriptions were excluded from the study.

The collected data included patients' personal data, the number of prescriptions that included MEBO ointment and that were prescribed during different months of the study, duration of MEBO ointment use, the level of prescribers who prescribed MEBO ointment, and the departments that prescribed MEBO ointment.

The data were collected from electronic medical records as an Excel file and the data were represented as frequencies and after that each frequency divided by the total numbers, and then multiplying the result by 100% to find the percentages.

RESULTS and DISCUSSION

MEBO ointment was prescribed for 121 patients during the study period. More than 61% of the patients were female patients and the age of 37.19% of them was between 20 and 29 years. Table 1 shows the personal data of the patients.

Table 1. The personal data of the patients.

Variable	Category	Number	Percentage
Gender	Female	75	61.98
	Male	46	38.02
Age	Less than 10	20	16.53
	10-19	11	9.09
	20-29	45	37.19
	30-39	15	12.40
	40-49	7	5.78
	50-59	15	12.40
	60-69	3	2.48
	More than 69	5	4.13
Nationality	Saudi	82	67.77

	Non- Saudi	39	32.23

Table 2 shows the number of prescriptions that included MEBO ointment and that were prescribed during different months of the study. More than 10% of the prescriptions were dispensed in May and 10.74% were dispensed in December.

Table 2. The number of prescriptions that included MEBO ointment.

Month	**Number**	**Percentage**
January	9	7.44
February	6	4.95
March	11	9.09
April	9	7.44
May	13	10.74
June	12	9.92
July	9	7.44
August	12	9.92
September	11	9.09
October	8	6.61
November	8	6.61
December	13	10.74

Table 3 shows the duration of MEBO ointment use. About 61.98 % of the patients received MEBO ointment for 1 week.

Table 3. The duration of MEBO ointment use.

Duration	**Number**	**Percentage**
3 Days	1	0.83
5 Days	8	6.61
1 Week	75	61.98
10 Days	1	0.83
2 Weeks	27	22.31
3 Weeks	9	7.44

Table 4 shows the level of prescribers who prescribed MEBO ointment. Most of the prescribers were residents (76.86%).

Table 4. The level of prescribers.

Prescribers Level	**Number**	**Percentage**
Specialist	11	9.09
Resident	93	76.86
Consultant	17	14.05

Table 5 shows the departments that prescribed MEBO ointment. More than 46% of the prescriptions were prescribed by emergency department, about 24% were prescribed by plastic surgery department, and 18.18% of the prescriptions were prescribed by obstetrics & gynecology department.

Table 5. The departments that prescribed MEBO ointment.

Department	**Number**	**Percentage**
Emergency	56	46.28
Internal Medicine	2	1.65
General Surgery	4	3.30
Nephrology	5	4.13
Obstetrics & Gynecology	22	18.18
Plastic Surgery	29	23.97
E.N.T	1	0.83
Dermatology	2	1.65

The use of MEBO ointment was uncommon in the outpatient setting in Alkharj. In contrast to this result, Mabvuure stated that MEBO is prescribed frequently to manage burn wounds, mainly in Asia and the Middle East [2]. Hong-Bo et al stated that MEBO is one of the commonly used medicines for skin ulcers [10]. Jewo et al stated that MEBO is an efficacious and an appropriate alternative to conventional silver-based topical treatments for managing partial-thickness burn wounds and that concerns about the toxicity of purified chemicals will continue to make people turn to complementary and alternative medicines such as MEBO [11].

Although MEBO was prescribed for only 60 patients during the first 6 months of the year in a public hospital in Alkharj, silver sulfadiazine was prescribed to only 30 patients in 12 months [12]. More than half of the MEBO prescriptions in the present study were prescribed by emergency department or by plastic surgery department. This is rational because the patients who have burns are usually treated by these departments.

Most of the prescriptions in the present study were prescribed by residents and this is rational because MEBO is an over the counter drug that is generally safe. Moreover, most of the patients received MEBO ointment for 1 or 2 weeks. This is also rational as the superficial and partial-thickness burns usually heal within 2 weeks unless complications such as infection or chronic diseases occur [13,14].

CONCLUSION

The use of MEBO ointment in the outpatient setting in Alkharj was uncommon. Further studies are needed to explore the pattern of using burn treating ointments such as MEBO ointment in the outpatient setting and in other settings.

NOTE:

The study highlights the efficacy of "herbal" which is an ancient tradition, used in some parts of India. This ancient concept should be carefully evaluated in the light of modern medical science and can be utilized partially if found suitable.

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