



Mebeverine Prescribing in the Outpatient Setting in Riyadh Region

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Authors' contributions

This work was carried out in collaboration among all authors. All authors read and approved the final manuscript.

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ABSTRACT

Aim: The present study aimed to explore mebeverine prescribing in the outpatient setting in Riyadh Region.

Methodology: This was a retrospective study that included reviewing the outpatient prescriptions of mebeverine in a governmental hospital in Riyadh Region. The study excluded the prescriptions that were prescribed by other settings and the outpatient prescriptions that didn't contain an mebeverine.

Results: During the study period between January 2018 to June 2018, mebeverine was prescribed to 113 patients. most of them were females (62.83%). The age of 29.20% of the patients was between 50 and 59 years. Most of the prescriptions that contained mebeverine were written by residents (86.73%) and most of the prescriptions that contained mebeverine were prescribed by internal medicine (34.51%), gastroenterology (23.89%), and emergency (21.24%) departments.

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

Keywords: *Antispasmodic; mebeverine; outpatient; prescribing.*

1. INTRODUCTION

Irritable bowel syndrome is a complex and widely-encountered syndrome. It is a condition that is characterized by abdominal pain associated with disordered defecation in the absence of any demonstrable abnormality [1]. There are three Irritable bowel syndrome subgroups: those with diarrhea, those with constipation, and those with alternating constipation or diarrhea [2]. The management of it is targeted at the management of diarrhea, constipation, and abdominal pain and generally includes pharmacotherapy with 5-HT(3)-receptor antagonists [3].

Antispasmodic is a medicine that relieves, prevents, or lowers the occurrence of muscle spasms, particularly those of smooth muscle [4]. There are two main types of antispasmodics that are antimuscarinics such as hyoscine and smooth muscle relaxants such as mebeverine [5].

Mebeverine is available as tablets or slow-release capsules and it is available also as a liquid if the patients have trouble swallowing tablets [6]. It relieves or prevents painful stomach cramps that are caused by irritable bowel syndrome or other conditions [6]. So, mebeverine is used for the symptomatic treatment of irritable bowel syndrome and other conditions including spastic constipation, chronic irritable colon, spastic colitis, mucous colitis [7].

Mebeverine could cause few side effects such as insomnia, dizziness, anorexia, headache, decreased heart rate, gastrointestinal disturbances, and hypersensitivity [8]. The side effects of mebeverine are usually mild and rarely cause a problem [9]. Poynard et al reported that the incidence of side effects caused by mebeverine has not been demonstrated to be higher than that of a placebo [10] but some adverse reactions have been reported spontaneously during postmarketing use such as hypersensitivity, angioedema, urticaria, exanthema, and face oedema [7].

The study of prescribing pattern is very important for the reason that it gives an idea to the prescribers about the monitoring and the assessment of the medicines use and endorses the needed modifications [11]. The present study aimed to explore mebeverine prescribing in the outpatient setting in Riyadh Region.

2. METHODOLOGY

This was a retrospective study that included reviewing the outpatient prescriptions of mebeverine among the patients that were visited a governmental hospital in Riyadh Region. The inclusion criteria included the outpatient prescriptions that contained mebeverine and the exclusion criteria included the prescriptions that were prescribed by other settings and the outpatient prescriptions that didn't contain an mebeverine.

The collected data included the personal data of patients, the number of mebeverine prescriptions that were prescribed during different months of the study, the duration of mebeverine use, prescription type and the availability of patient insurance, the level of prescribers who prescribed mebeverine, the type of mebeverine prescriptions, and the departments that prescribed mebeverine.

The data were collected and analyzed by Excel spreadsheet and the descriptive data were represented as numbers and percentages.

3. RESULTS AND DISCUSSION

During the study period between January 2018 to June 2018, mebeverine was prescribed to 113 patients. most of them were females (62.83%). The age of 29.20% of the patients was between 50 and 59 years and the age of 69.90% of them was between 30 and 59 years. The personal data of the patients are shown in Table 1.

Table 2 shows the number of mebeverine prescriptions that were prescribed during different months of the study. More than 30% of the prescriptions were prescribed in April.

Table 3 shows the duration of mebeverine use. More than 24% of the patients received mebeverine for 1 month and 24.78% of them received it for 3 months.

Table 4 shows the type of the prescriptions and the availability of patient insurance. More than 93% of the prescriptions were regular and 98.23% of the patients received their medications without cost or payment.

Table 5 shows the level of prescribers who prescribed mebeverine. Most of the prescriptions that contained mebeverine were written by residents (86.73%).

Table 1. The personal data of the patients

Variable	Category	Number	Percentage
Gender	Female	71	62.83
	Male	42	37.17
Age	10-19	1	0.88
	20-29	15	13.27
	30-39	23	20.35
	40-49	23	20.35
	50-59	33	29.20
	60-69	9	7.97
	More than 69	9	7.97
Nationality	Saudi	99	87.61
	Non- Saudi	14	12.39

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

Month	Number	Percentage
January	13	11.50
February	18	15.93
March	27	23.89
April	35	30.97
May	11	9.73
June	9	7.97

Table 3. The duration of mebeverine use

Duration	Number	Percentage
1 Week	23	20.35
10 Days	3	2.66
15 Days	1	0.88
1 Month	28	24.78
45 Days	19	16.81
2 Months	11	9.73
3 Months	28	24.78

Table 4. Prescription type and patient insurance

Variable	Category	Number	Percentage
Prescription type	Regular	106	93.81
	Urgent	7	6.19
Patient insurance	Free	111	98.23
	Private	2	1.77

Table 5. The level of prescribers

Prescribers Level	Number	Percentage
Specialist	1	0.88
Resident	98	86.73
Consultant	14	12.39

Table 6. The departments that prescribed mebeverine

Department	Number	Percentage
Endoscopy	8	7.08
Emergency	24	21.24
Gastroenterology	27	23.89
Internal Medicine	39	34.51
Nephrology	8	7.08
Urology	7	6.19

Table 6 shows the departments that prescribed mebeverine. Most of the prescriptions that contained mebeverine were prescribed by internal medicine (34.51%), gastroenterology (23.89%), and emergency (21.24%) departments.

Mebeverine was prescribed commonly during the study. This is rational because it is used to manage painful stomach cramps due to irritable bowel syndrome that is a common condition. Canavan et al reported that irritable bowel syndrome is the most common functional gastrointestinal disorder with a global prevalence of 11% [12]. Basnayake stated that anticholinergic and anti-spasmodic agents are common agents that are used to manage the abdominal pain of irritable bowel syndrome patients [13]. Moreover, 'Rai and Nijhawan' and 'Hatami et al' informed that mebeverine is one of the frequently used antispasmodic medications for the treatment of irritable bowel syndrome [14,15].

More than 48% of the patients received mebeverine for 1 month or for 3 months. This is rational because irritable bowel syndrome is a chronic condition of the large intestines and it needs a long term treatment [16,17]. Evangelista reported that long term treatment should be reserved to diagnosed irritable bowel syndrome patients with recurrent symptoms [18].

Most of the prescriptions that contained mebeverine were prescribed by internal medicine, gastroenterology, and emergency departments. The patients who visited these departments are commonly suffer from stomach cramps that are caused by irritable bowel syndrome or other gastrointestinal conditions.

4. CONCLUSION

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

CONSENT

It is not applicable.

ETHICAL APPROVAL

It is not applicable.

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COMPETING INTERESTS

Authors have declared that no competing interests exist.

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