



Frequency of Dydrogesterone Use in the Gynecological Outpatient Clinics

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Authors' contributions

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

Article Information

DOI: 10.9734/JPRI/2021/v33i59B34419

Open Peer Review History:

This journal follows the Advanced Open Peer Review policy. Identity of the Reviewers, Editor(s) and additional Reviewers, peer review comments, different versions of the manuscript, comments of the editors, etc are available here: <https://www.sdiarticle5.com/review-history/79202>

Original Research Article

Received 08 October 2021

Accepted 17 December 2021

Published 18 December 2021

ABSTRACT

Aim: This study aimed to describe the use of dydrogesterone in the outpatient setting in Al-Kharj.
Methodology: This is a retrospective study that includes reviewing the electronic prescriptions of dydrogesterone among outpatients in a public hospital in Alkharj.
Results: During the study period between January 2018 to June 2018, 48 patients received dydrogesterone. The age of 41.67% of the patients was between 20 and 29 years. Most of dydrogesterone prescriptions were written by residents (89.58%) and more than 60% of dydrogesterone prescriptions were written by emergency department (60.42%).
Conclusion: The present study showed that the prescribing of dydrogesterone was uncommon in the outpatient setting. More studies are needed to explore the frequency of its prescribing in other settings and to explore the prescribing of other medications that are used for gynecological conditions.

Keywords: *Dydrogesterone; outpatient clinic; progesterone; hormonal replacement; gynecology and obstetrics.*

1. INTRODUCTION

Dydrogesterone is a synthetic progesterone for menstrual cycle regulation, prevention of

miscarriage, infertility treatment, and other conditions [1]. Dydrogesterone is an orally active progestogen which acts directly on the uterus, producing a complete secretory endometrium in

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an estrogen-primed uterus. It has no contraceptive effect at therapeutic levels as it does not inhibit or interfere with ovulation or the corpus luteum [1].

Dydrogesterone has a structure closely related to that of progesterone yet with a greater bioavailability and higher selectivity for the progesterone receptor [2]. It has been on the market since the 1960s [3]. It is an effective and safe medicine but is under-utilized due to limited clinical research [4].

Dydrogesterone is not recommended for use in patients below 18 years of age [5] and could cause several side effects such as menstrual disorders, breast tenderness, bleeding and spotting, venous thromboembolism, nausea, vomiting, headache, dizziness and rash [1]. Dydrogesterone interacts with several medications such as abametapir, abciximab, abiraterone, acenocoumarol, alteplase, amiodarone, amprenavir [6].

The study of prescribing pattern is important because it gives an idea to the doctors about the monitoring and the assessment of the drugs and endorses the needed modifications [7]. This study aimed to describe the use of dydrogesterone in the outpatient setting in Al-Kharj.

2. METHODOLOGY

This is a retrospective study that includes reviewing the electronic prescriptions of dydrogesterone among outpatients in a public

hospital in Alkharj. The inclusion criteria include outpatient prescriptions that contained dydrogesterone in the study period from 1st of January 2018 to the end of June 2018. Exclusion criteria include all of the inpatient prescriptions in addition to the outpatient prescriptions that don't contain an dydrogesterone.

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

The data were collected and analyzed by Excel spreadsheet software and the descriptive data were represented as a frequencies and percentages.

3. RESULTS AND DISCUSSION

During the study period between January 2018 to June 2018, 48 patients received dydrogesterone. The age of 41.67% of the patients was between 20 and 29 years. The personal data of the patients is shown in Table 1.

Table 2 shows the number of the prescriptions that were written during the study and that contained dydrogesterone. About 25% of the prescriptions were prescribed in February.

Table 3 shows the duration of dydrogesterone use. More than 41% of the patients used dydrogesterone for 1 month

Table 1. The personal data of the patients

Variable	Category	Number	Percentage
Age	20-29	20	41.67
	30-39	19	39.58
	40-49	9	18.75
Nationality	Saudi	34	70.83
	Non- Saudi	14	29.17

Table 2. The number of the prescriptions that contained dydrogesterone during the study

Month	Number	Percentage
January	11	22.92
February	12	25.00
March	8	16.67
April	6	12.50
May	7	14.58
June	4	8.33

Table 3. The duration of dydrogesterone use

Duration	Number	Percentage
1 Week	10	20.83
2 Weeks	17	35.42
3 Weeks	1	2.08
1 Month	20	41.67

Table 4. The level of prescribers

Prescribers Level	Number	Percentage
Specialist	3	6.25
Resident	43	89.58
Consultant	2	4.17

Table 5. The departments that prescribed dydrogesterone

Department	Number	Percentage
Emergency	29	60.42
Obstetrics & Gynecology	19	39.58
Total	48	100

Table 4 shows the level of prescribers who prescribed dydrogesterone. Most of dydrogesterone prescriptions were written by residents (89.58%).

Table 5 shows the departments that prescribed dydrogesterone. More than 60% of dydrogesterone prescriptions were written by emergency department (60.42%).

The prescribing of dydrogesterone was uncommon in the present study. Pang and Ma reported that progestogens were prescribed for 81,080 patients, (88.6% of the patients with threatened miscarriage), among which oral progesterone (39.7%) was the most commonly used, followed by oral dydrogesterone (34.4%) [8]. Ahmed stated that among the most prescribed medications in the outpatient department of obstetrics and gynecology, dydrogesterone is used in 2.35% of the patients [9].

The age of more than 81% of the patients who received dydrogesterone was between 20 and 39 years. This is rational because it is used for prevention of miscarriage, infertility treatment, and other conditions [1]. This is rational because women can get pregnant and bear children from puberty when they start getting their menstrual period to menopause when they stop getting it [10] and the fertility of women peaks in their late teens and early 20s, and it can start to decline by age 30 [11].

The present study showed that 56.25% of the patients used dydrogesterone, for 1 week or 2 weeks and 41.67 % of them used it for 1 month. This is rational because the dose and duration of dydrogesterone is different for treating different indications. For example, it is used for up to 10 days to stop dysfunctional uterine bleeding and used for 14 days in secondary amenorrhoea and in endometrial protection during menopausal hormonal replacement therapy [6].

4. CONCLUSION

The present study showed that the prescribing of dydrogesterone was uncommon in the outpatient setting. More studies are needed to explore the frequency of its prescribing in other settings and to explore the prescribing of other medications that are used for gynecological conditions.

CONSENT

It is not applicable.

ETHICAL APPROVAL

As per international standard or university standard written ethical approval has been collected and preserved by the author(s).

ACKNOWLEDGEMENT

This Publication was supported by the Deanship of Scientific Research at Prince Sattam bin Abdulaziz University.

COMPETING INTERESTS

Authors have declared that no competing interests exist.

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Peer-review history:

The peer review history for this paper can be accessed here:
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