

Evaluation of Progesterone Efficacy in Women with Threatened Miscarriage in Kohat

Progesterone Efficacy in Women with Threatened Miscarriage

Beenish Samreen Hamid¹, Tajwar Sultana², M Irfan ul Akbar Yousufzai³, Fouzia Qadir⁵, Rana Tauqir Ullah Khan⁴ and Muhammad Shereen⁵

ABSTRACT

Objective: The objective of this study to evaluate efficacy of progesterone in women with threatened miscarriage in Kohat.

Study Design: Case-Control study

Place and Duration of Study: This study was conducted at the Obstetrics and Gynecology KMU-IMS Kohat and Department of Pharmacology Muhammad College of Medicine's Peshawar from February 2020 to January 2021 for a period of 11 months.

Materials and Methods: Patients in the Test Group (Oral progesterone) ranging in age from 30.54 to 10.48 year. Patients in the Control Group (no progesterone) ranged in age from 30.55 to 10.38 years old. All of the women were given a thorough medical history and examination. Women were divided into two groups at random: test and control. The absence of vaginal bleeding was used to measure efficacy.

Results: A total of 210 women (105 in each group) were examined in this trial, with patients in the Test Group (Oral progesterone) ranging in age from 30.54 to 10.48 year. Patients in the Test Group (no progesterone) ranged in age from 30.55 to 10.38 years. Because Control Group (Oral progesterone) was effective in 91 (95.55 %) patients and Control groups resulted in 5 (5.25%) patients, Efficacy was measured in terms of absence of vaginal bleeding.

Conclusion: Oral progesterone was found to be more efficacious than placebo in reducing threatening miscarriages in the first trimester. Our findings suggest that progesterone medications are helpful in preventing miscarriage in women who are at risk of miscarriage.

Key Words: Oral progesterone, threatened miscarriage

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INTRODUCTION

In most of the pregnancy cases at least 15%–20%, Miscarriage problem faced by women. In pregnant women, it is a major problem which should be treated at time otherwise caused major cynically issues.¹ the fetus remains also visible and it is present inside the uterine cavity and the cervix of uterine cavity remains closed. In threatened miscarriage, vaginal bleeding is occurred with and without stomach pain. It means that bleeding and pain are major and main symptoms of threatened miscarriage.

¹. Department of Obstet and Gynaecol, KMU-IMS Kohat.

². Department of Pharmacology / Physiology³ / Community Medicine⁴, Muhammad College of Medicine, Peshawar.

⁵. Department of Biochemistry, Northwest School of Medicine Peshawar.

Correspondence: Dr. Asnad, Associate Professor of Biochemistry, MBBS Medical College, Mirpur AJ&K.
Contact No: 0332-3698204
Email: drasnadkhan@gmail.com

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Major reason of miscarriage in women is due to their families and their psychological effect and impact. It is necessary that for the treatment of miscarriage to remove psychological effect and impact.² Deferent Physiological result showed that progesterone has multi-function in pregnancy from peri-implantation to the delivery of fetus in which (endometrium transformation, semi allogenic fetus from the mother's immune system man and control of uterine contractions etc.)³ On the result of different research studies, for the miscarriage treatment, progesterone is used as medicine from long time and efficacy of progesterone is best as compare to other drugs.⁴ in other clinical trials for impending abortion, the result for efficacy of progesterone treatment is varied. Controversial findings were found in threatening abortions during treatment of patients by doctor. Progesterone is a fundamental hormone from fertilized ovum to implantation it is also caused secretory changes in the uterine lining for conception and preservation of pregnancy in women.⁵ Progesterone has great effect on controlling the mother's immunological response, for prevention the embryo from redetection, in mother uterine cavity.⁶ Those women who are at risk of miscarriage, for maintaining pregnancy, progesterone has physiological significance for their treatment of

miscarriage. Different studies results of pregnancies (13–40%) showed that in first trimester, vaginal blood bleeding is stated loss.⁸ The aim of this research to evaluate efficacy of progesterone in women with threatened miscarriage in Kohat.

MATERIALS AND METHODS

The research was carried out at the KMU-IMS Kohat Department of Obstetrics and Gynecology and the Muhammad College of Medicine's Pharmacology Department in Peshawar. The study lasted one year, from February 2020 to January 2021. Case-control research was used in this study. A total of 210 women (105 in each group) were examined in this trial, with patients in the Test Group (Oral progesterone) ranging in age from 30.54 to 10.48 year. Patients in the Control Group (no progesterone) ranged in age from 30.55 to 10.38 years old. All of the women were given a thorough medical history and examination. Women were divided into two groups at random: test and control. The absence of vaginal bleeding was used to measure efficacy. All information like age, address POG and efficacy were recorded on pre designed Performa. Data was analyzed using SPSS IBM 21.0. Quantitative variables like age was described as mean \pm SD. Women who had experienced trauma during pregnancy or who had a history of bleeding issues were excluded. Following ethical permission from the hospital. The research included all women who met the eligibility requirements through the OPD or ER. All of the women were given a thorough medical history and examination. The women were divided into two groups at random using a lottery system. Oral progesterone was given to women in Group A. (10mg twice daily).

RESULTS

Table No.1: Participants Characteristics

	Test Progesterone Oral (n=105)	Control (n=105)
Age (years)	30.51 \pm 10.48	30.55 \pm 10.38
Education		
Basic	B-50%	B-50%
Secondary	S-25%	S-31%
University	U-25%	U-19%
Body Weight (Kg)	68.1 \pm 11.4	98.4 \pm 11.5
BMI (Kg/m ²)	24.3 \pm 2.6	24.4 \pm 2.7

B: Basic, S: Secondary, U: University

A total of 210 women (105 in each group) were examined in this trial, with patients in the Test Group (Oral progesterone) ranging in age from 30.54 to 10.48 year. Patients in the Test Group (no progesterone) ranged in age from 30.55 to 10.38 years. Because Control Group (Oral progesterone) was effective in 91 (95.55 %) patients and Control groups resulted in 5

(5.25%) patients, Efficacy was measured in terms of absence of vaginal bleeding and pregnancy continuing beyond 2 weeks of gestation.

Table No.2: Efficacy of oral progesterone in threatened miscarriage women

Oral progesterone (n=105)	No progesterone Control (n=105)
Efficacy	
91 (95.55%)	05 (5.25%)

DISCUSSION

This prospective case-control study, in which examines vaginal bleeding in the first trimester and changes in pregnant women. There is some impact of (mode of conception, Culture on maternal, maternal weight, gestational age, smoking status and parity) on blood aneuploidy screening indicators.⁹⁻¹⁴

The research was carried out at the KMU-IMS Kohat Department of Obstetrics and Gynecology and the Muhammad College of Medicine's Pharmacology Department in Peshawar. The study lasted one year, from February 2020 to January 2021. Case-control research was used in this study. A total of 210 women (105 in each group) were examined in this trial, with patients in the Test Group (Oral progesterone) ranging in age from 30.54 to 10.48 year. Patients in the Control Group (no progesterone) ranged in age from 30.55 to 10.38 years old. All of the women were given a thorough medical history and examination. Women were divided into two groups at random: test and control. The absence of vaginal bleeding was used to measure efficacy. In most of the pregnancy cases at least 15%–20%, Miscarriage problem faced by women. In pregnant women, it is a major problem which should be treated at time otherwise caused major cynically issues. The fetus remains also visible and it is present inside the uterine cavity and the cervix of uterine cavity remains closed. In threatened miscarriage, vaginal bleeding is occurred with and without stomach pain. It means that bleeding and pain are major and main symptoms of threatened miscarriage. Major reason of miscarriage in women is due to their families and their psychological effect and impact. It is necessary that for the treatment of miscarriage to remove psychological effect and impact. There are some studies indicate there no effect and it is said that maternal-fetal barrier is disturbed by early vaginal bleeding and it also enhance b-hCG transfer rate in maternal circulation.¹⁵ There are some mixed result exist related progesterone in threatened miscarriage.^{16,17} In our study, there is significant reduced vaginal bleeding in threatened miscarriage women. A total of 210 women (105 in each group) were examined in this trial, with patients in the Test Group (Oral progesterone) ranging in age from 30.54 to

10.48 year. Patients in the Test Group (no progesterone) ranged in age from 30.55 to 10.38 years. Because Control Group (Oral progesterone) was effective in 91 (95.55 %) patients and Control groups resulted in 5 (5.25%) patients, Efficacy was measured in terms of absence of vaginal bleeding and pregnancy continuing beyond 2 weeks of gestation.

Deferent Physiological result showed that progesterone has multi-function in pregnancy from peri-implantation to the delivery of fetus in which (endometrium transformation, semi allogenic fetus from the mother's immune system man and control of uterine contractions etc.) On the result of different research studies, for the miscarriage treatment, progesterone is used as medicine from long time and efficacy of progesterone is best as compare to other drugs. in other clinical trials for impending abortion, the result for efficacy of progesterone treatment is varied. Controversial findings were found in threatening abortions during treatment of patients by doctor. Progesterone is a fundamental hormone from fertilized ovum to implantation it is also caused secretary changes in the uterine lining for conception and preservation of pregnancy in women. Progesterone's physiological has effects dose-dependent in relaxation of smooth muscle of placenta.¹⁸

dose-dependent relaxation of placental vascular smooth muscle and the umbilical vein is one of progesterone's physiological effects.¹⁸ Irregular fetal blood stream is observed in some study while taking progesterone tablets.^{19,20} Progesterone has great effect on controlling the mother's immunological response, for prevention the embryo from redetection, in mother uterine cavity. Those women who are at risk of miscarriage, for maintaining pregnancy, progesterone has physiological significance for their treatment of miscarriage. Different studies result of pregnancies (13–40%) showed that in first trimester, vaginal blood bleeding is stated loss.

CONCLUSION

Oral progesterone was found to be more efficacious than placebo in reducing threatening miscarriages in the first trimester. Our findings suggest that progesterone medications are helpful in preventing miscarriage in women who are at risk of miscarriage.

Author's Contribution:

Concept & Design of Study:	Beenish Samreen Hamid
Drafting:	Tajwar Sultana, M Irfan ul Akbar Yousufzai
Data Analysis:	Fouzia Qadir, Rana Tauqir Ullah Khan, Muhammad Shereen
Revisiting Critically:	Beenish Samreen Hamid, Tajwar Sultana
Final Approval of version:	Beenish Samreen Hamid

Conflict of Interest: The study has no conflict of interest to declare by any author.

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