ORIGINAL RESEARCH PAPER

Volume - 10 | Issue - 07 | July - 2021 | PRINT ISSN No. 2277 - 8179 | DOI : 10.36106/ijsr

INTERNATIONAL JOURNAL OF SCIENTIFIC RESEARCH

TO STUDY COMPLIANCE EFFECTIVENESS OF INJECTABLE DEPOT-MEDROXYPROGESTERONE ACETATE (DMPA) IN POSTABORTAL AND POSTPARTUM PERIOD

Obstetrics & Gynaecology

Dr. Sanjaya Sharma (MD) Professor and Head, Department of Obstetrics and Gynaecology, Maharani Laxmi Bai Medical College, Jhansi.

Dr. Sushila Kharkwal (MD) Professor and Head, Department of Obstetrics and Gynaecology, Government Medical College, Orai (Jalaun).

Dr. Neha Singh* Junior Resident, Department of Obstetrics and Gynaecology, Maharani Laxmi Bai Medical College, Jhansi.*Corresponding Author

ABSTRACT

Introduction: The use of safe and effective contraception is the need of the hour in India due to increasing population. Progesterone-only injectable contraceptives have better compliance than oral contraceptives as it is does not require regular consumption. Inj. depot medroxy progesterone (DMPA) has been found to provide effective, long acting and reversible contraception in lactating mother and postabortal patients. **Aims and objectives:** To study the effectiveness and compliance of injectable DMPA in postabortal and postpartum period.Comparison of injectable DMPA with oral contraception. **Material and methods:** This prospective study included 150 married women aged between 18-50 years who were in need of contraception in the postabortal or postpartum period. Injection DMPA 150 mg I.M. was given deep intramuscularly after counselling immediately in postabortal or after 6 weeks of postpartum in breast feeding mother's and within 4 week in nonbreast feeding mother's. Subsequent injections were given at three monthly intervals. All women were followed for one year after the first injection.**Results:** It was observed that out of 150 women 52% were from age group of 26-30 years and 42 % were more than 2 parity. Most common side effect was irregular bleeding 54% followed by amenorrhea in 13.3%. 36.6% had stopped injection due to side effect and 14 % women had changed contraception. 7.3% women had planned pregnancy and 26.6 % women had lost to follow up. Not a single patient became pregnant during the study period. **Conclusion:** DMPA is an extremely effective injectable contraceptive due to convenience of dosing, accessibility and has better compliance as compared to oral contraceptives. DMPA has been proven to protect against ectopic pregnancy, prevention of uterine tumors and pelvic inflammatory disease. It is suitable for postpartum ladies as it has no estrogen side effects. It can be used without consent of male partner and does not interfere with sexual intercourse.

KEYWORDS

DMPA, Compliance, Contraception.

INTRODUCTION

The major problem in developing country is increasing population. The use of safe and effective contraception is the need of the hour in India[1]. Availability of contraceptive measure is easy and also cost effective but the problem of ignorance and unawareness remain. Long term and continuous use of contraceptive is the problem. Injectable contraceptive makes compliance better and less side effect makes contraception acceptable. Other contraceptive method involve remembering take a pill daily. Difficult for those women who lead irregular lifecycle very busy. DMPA is accepted by women who cannot remember to take OC pills regularly and by those who do not wish to insert an IUD.

Inj. DMPA provide long acting ,effective and reversible contraception[2]. Depot Medroxy- Progesterone Acetate, or DMPA is a progestin-only method of contraception . It is a 3-monthly intramuscular injectable that delivers 150 mg of Medroxy-progesterone acetate in microcrystalline suspension form that delays absorption of the hormone after the injection. DMPA act by inhibiting of ovulation by suppressing mid cycle LH peak,thickness cervical mucus and the endometrium become atrophic prevent blastocyst implantation.

AIMS AND OBJECTIVES

- To study compliance of injectable DMPA in postabortal and postpartum period.
- To study effectiveness of injectable DMPA in postabortal and postpartum period.
- Comparison of injectable DMPA with other method of contraception.

MATERIAL AND METHODS

The prospective study was conducted at Obstetrics and Gynaecology Department, Maharani Laxmi Bai Medical College, Jhansi in married women aged between 18 to 50 year who were in need of cotraceptive in postabortal and postpartum women. 150 women were included study was conducted for 1 years from August 2019 to August 2020. All eligible women was given choice of contraceptive options and explain well about the benefits and side effect. Women who choose DMPA were included.

Injection DMPA 150mg was given intramuscularly after counseling immediately in postabortal or after 6week of postpartum in breastfeeding mother and within 4 week in non breasfeeding mother. Patient were ask to come for next dose and follow up visits and ask about problem occurring were noted subsequently.

INCLUSION CRITERIA:

- Age- female >18 years age in postabortal and post partum.
- Patient who want long term ,effective, non coitus depended contraception.
- Who given a written informed consent and willing for follow up. Patients not suffering any chronic illness.

EXCLUSION CRITERIA

- Who not give consent.
- Unexplained per vaginal bleeding.
- Hypertensive or cardiac disease women. Breast cancer.
- Liver or kidney disease .
- Migraine with aura at any age .
- Diabetes .

RESULT

Table 1: Age distribution

Age (year)	Number of patients	Percentage
21-25	46	30.6%
26-30	78	52%
31-35	14	9.3%
>35	12	8%

Most of the women 78 (52%) recruited in the present study were from the age group of 26 to 30 years.

Table 2: Parity wise distribution

Parity	Number of patients	Percentage
Nulligravida	0	0%
1	27	18%
2	63	42%
>3	60	40%

Most of the women 63 (42%) had 2 or more children, thus had

completed their family size.

Table 3: Side effect

Side effect	Number of patients	Percentage
Irregular bleeding	81	54%
Weight gain	15	10%
Amenorrhea	20	13.3%
No problem	24	16%
Headache	10	6.6%

Among the patient who came for follow up.

Most common side effect noted was irregular bleeding / spotting, which was seen in 81 women (54%).

Second most common side effect noted was amenorrhoea, which was seen in 20 women (13.3 %).

Table 4: Socioeconomic status

Socioeconomic status	Number of patients	Percentage
Lower	17	11.3%
Middle	96	64%
Upper	37	24.4%

Table 5: Discontinuation rate

Follow up rate	Number of patients	Percentage
After 1st injection	106	70.6%
2nd injection	78	52%
3rd injection	52	34.6%
4th injection	37	24.6%

Most of the women 70.6 % had lost to follow up after first injection. The reasons can be attributed to their sociocultural factors, as most of them were residents of distant places, Few of them had opted for further pregnancies. Hence, discontinued the injections.

Table 6: Reason for attrition

Reason for attrition	Number of patients	Percentage
Lost of follow up	40	26.6%
Side effect	50	36.6%
Planning pregnancy	11	7.3%
Missed injection / change contraception	21	14%

Reason for attrition Most common reason for discontinuation in 50 (36.6%) women were the side effects. 21(14%) women had changed contraception. 11(7.3%) had planned pregnancy. 40 (26.6%) were lost to follow up.

DISCUSSION

In our study150 women 52% were age group 26-30 years and 42% were more than 2 parity.

It was observed that, Most common side effect was irregular bleeding 54% which is higher than the study of Nair et al (2017) where irregular spotting occurred in 45% of women .

Amenorrhea was seen in 13.3% of the women which is higher than Fonsea M et al 4.5%[3] but lower than Nair et al where amenorrhea occurred in 65% of the women[4].

Amenorrhea is beneficial for women suffering from anemia, dysmenorrhea and menorrhagia and amenorrhic women wanted to continue due to its beneficial effect on health[5] .

Weight gain found in 10 % of women which is higher than that found in studies conducted by Shweta Mishra et al (2.7 %)[6] and Babre VM et al (9.2 %)[7].

Discontinuation rate was 70.6% after 1st injection which is similar to studies conducted by Fonseca M. et al (73 %)[3] and Shweta Mishra et al (73 %)[6]. Higher discontinuation rate may be due to various factors like side effects, socio cultural factors and family myth like irreversibility of injection or rural women coming from long distance who were lost to follow-up.

36.6% had stopped injection due to side effect and 14% women change contraception, 7.3%women planned pregnancy and 26.6% women had lost to follow up.

Not a single patient became pregnant during study period.

With proper selection of cases with good counseling and diligent follow up compliance can be improved[8].

Progesterone only contraceptives do not impair lactation and in fact, may increase the quality and duration of lactation .

Injectable contraceptive minimize women dissatisfaction and fear of forgetting the daily usage leads to reduction of oral contraception consumption.

DMPA decrease risk of iron deficiency anaemia, pelvic inflammatory disease, ectopic pregnancy, uterine fibroid, decrease symptom of endometriosis or decreases risk of endometrial and epithelial ovarian cancer[9,10].

DMPA should be consider a highly effective safe,long acting, convenient, reversible contraceptive.

Pre use counselling is essential to minimise the effect of menstrual change which occur in most of patient.

CONCLUSION

DMPA should be available as a first line method to all who wish to opt for reversible methods of contraception. The effectiveness of long-acting reversible contraception is superior to that of contraceptive pills.

Pre use counselling regarding initial irregular bleeding and later amenorrhea will further improve acceptance and satisfaction and continuation rate of DMPA.

If women are given reminder for their follow up by using phone etc.It could increase regular and uninteruppted use of injection.

REFERENCES:

1. Finer LB, Zolna MR. Unintended pregnancy in the United States: incidence and disparities, 2006. Contraception. 202011;84:478-85.
2. Westoff C. Depot medroxyprogesterone acetate injection: a highly effective contraception with proven long term safety. Contraception. 2011;68(2):75-87.
3. Fonseca Michelle, Prasad Yashwant Deshmukh, Deepali Kharat. International Journal of Reproduction, Contraception, Obstetrics and Gynaecology - DMPA: acceptance and compliance in a tertiary care hospital Mumbai, India. 2017; 6(9):3879-3881.
4. Lavanya Rai, Preethi Prabaka, Sreekumaran Nair. Injectable Depot Medroxy progesterone-A safe and effective contraception for an Indian Setting Health and PopulationPerspectives and Issues. 2007; 30(1):12-23.
5. H. Sadeghi-Bazargani, Z Fardyazar. Amenorrhea: An Advantage Rather than a Complication of Depot Medroxy Progesterone Acetate Injectable Contraceptive International Journal of Pharmacology. 2006; 2(3):352-356 .
6. Shweta Mishra, Rupali Gupta. Acceptability and compliance of DMPA among rural women in Sitapur UP. Int J Clin Obstet Gynaecol 2019;3(2):08-10.
7. International Journal of Reproduction, Contraception, Obstetrics and Gynecology Babre VM et al. Int J Reprod Contracept Obstet Gynecol. 2016 Oct;5(10):3422-3424.
8. Halpern V, Lopez LM, Grimes DA, Gallo MF. Strategies to improve adherence and acceptability of hormonal methods of contraception Cochrane Library, 2011.
9. Westhoff C. Depot-medroxyprogesterone acetate injection (depot-provera): a highly effective contraceptive option with proven long-term safely. Contraception. 2003; 68(2):75-87.
10. Leon S, Darney Philip D. Injectable contraception. In: Speroff Leon, Darney Philip D, eds. A Clinical Guide for Contraception. 4th ed. Philadelphia: Lippincott Williams and Wilkins; 2005: 201-220 10.Funded by the Susan Thompson) N Engl J Med 2012;366:1998-2007.