

INJECTION DEPOT MEDROXY PROGESTERENE ACETATE (DMPA): OUR EXPERIENCE AT TERTIARY CARE TEACHING HOSPITAL

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Abstract

Background: Injectable Contraceptive is fourth most popular family planning method worldwide after female sterilization, intra uterine contraceptive device & oral contraceptive. Postpartum contraception is crucial for health of women. **Method:** This was retrospective study from 1 st Jan 2020 to 31st August 2021 at tertiary care teaching hospital in pune Aim of study was to know demographic details of DMPA (Depot Metroxy Progesterone Acetate) users, side effects & compliance of Inj DMPA. Medical record of 223 women who opted for Inj DMPA after counseling regarding contraceptive options was studied. **Results:** Most common side effect observed in Inj DMPA users was menstrual disorder irregular bleeding 62.3% followed by weight gain, amenorrhea & headache in 9.4%,1.7% & 1.3% women respectively. 24.66% women were para one while majority of DMPA users belonged to 21 to 25 years of age group. **Conclusion:** MPA is highly effective, safe, long term reversible contraceptive option. Proper counseling if done before & after administration of Inj DMPA lead to better patient compliance.

Key words: DMPA, postpartum contraception, family planning,

Introduction

Study of injection Depomedroxyprogesterone acetate (DMPA) at tertiary care teaching hospital

India was the first country in the world to launch a family planning programme in 1952¹. Now India's National Family Planning Programme focus to reduce unwanted closely spaced & mistimed pregnancy through use of reversible spacing methods & avoiding pregnancies with higher risk & chances of unsafe abortion. During postpartum period fertility is resumed shortly especially if contraception is not initiated, there is increased risk of unintended pregnancy. Pregnancies with short inter- pregnancy interval (of less than one year) poses greater risk for women & their infant and have increased risk of adverse health outcome. During postpartum period women are motivated to initiate contraception & hence postpartum contraception is crucial for health of women. Injectable contraceptive is fourth most popular family planning method worldwide after female sterilization, intra-uterine contraceptive device & oral contraceptive².

Injectable contraceptive depo medroxy progesterone acetate (MPA) also popularly known as depo-provera has been found to be safe, effective & hasslefree method with full

confidentiality. Long acting reversible contraceptive depot medroxy progesterone acetate (DMPA) is a hormonal contraceptive with high acceptability as it is provided by injection every 3 months & is highly effective. If not counselled adequately about side effects of DMPA such as changes in menstrual bleeding pattern, weight gain etc may result in discontinuation of method. Hence close follow up, pre and post injection counseling are essential for continuation of injectable DMPA. Side effects experienced by dmpa users are markedly irregular vaginal bleeding, amenorrhea, weight gain, alopecia, reduced libido, depression, and osteopenia. We conducted present study with aim to know demographic details of DMPA users, side effects & compliance of DMPA were studied.

Method

A retrospective study was conducted during period of 1st Jan 20 to 31st August 21 at B.J. Government Medical college & SGH, Pune. In present study, medical record of 223 women who opted for inj DMPA after counseling regarding contraceptive options, its benefits and side effects were studied. Participants were screened for medical co-morbidities, correct timing for contraceptive start, breast feeding status and contraindications were ruled out.

Women willing for Inj DMPA were given Inj DMPA either in first week of menses or immediate post abortal or before discharge in postpartum period. All women underwent a thorough physical & gynaec examination. They were followed up for side effects including weight gain, irregular bleeding, headache. Blood pressure & weight was checked before Inj DMPA & during each visit. WHO medical eligibility criteria was used for selection of eligible DMPA users qualitative data was presented as frequencies.

Result

Out of 223 MPA users during study period, first dose of MPA was given to 159 women while 2nd, 3rd, 4th and subsequent doses of inj MPA was given to 29, 26 & 9 women respectively.

Table 1: Shows distribution of study group women according to age & parity

Sr.No	Age Groups	Frequency(N=223)	Percentage (%)
1	≤ 20	7	3.13
2	21-25	44	19.7
3	26-30	142	63.6
4	31-35	20	8.96
5	≥ 36	10	4.48
B)	Parity		
6	Nulligravida	8	3.5
7	1	55	24.66
8	2	100	44.8
9	≥ 3	60	26.9

Distribution of women according to age & parity is shown in Table-1. Majority of women were 21-25 yrs old. 44% women in study group were 2nd para. There was no case of contraception failure, during follow up period. Reason for discontinuation observed was significant weight gain or planning pregnancy or menstrual disturbances etc.

Table 2 shows distribution of women according to initiation of Inj DMPA during interval (in first week of menses), postpartum or postabortal period.

Table 2: Distribution of women according to initiation of Inj DMPA

Sr. No	Timing of initiation of DMPA	Frequency (N=223)	Percentage (%)
1	Interval	128	57.39
2	Postpartum	46	20.6
3	Post Abortal Period	49	21.97

Out of total 223 women, majority 128 women opted Inj DMPA during interval (in firstweek of menses) period, while 46 in postpartum & 49 in postabortal method.

Table 3: Shows weight wise distribution among study participants:-

Sr. No	Weight In Kg	Frequency(N=223)	Percentage (%)
1	≤ 35	14	6.2
2	36-45	52	23.31
3	46-55	86	38.56
4	≥55	71	31.83

Majority 86 women were of weight group 46-55kg

Table 4: Shows side effects of Inj DMPA among study participants.

Sr. No	Side Effects among DMPA users	Frequency(N=117)	Percentage (%)
1	Weight Gain	21	9.4
2	Irregular Bleeding/ spotting	139	62.3
3	Amenorhea	4	1.7
4	Headache	3	1.3

Most common side effect in DMPA users observed was irregular bleeding or spotting noted in 139(62.3%) cases. 21 women noticed weight gain. Maximum weight gain noticed was 3.5kg, weight gain of >2kg in one year could be due to other reasons like diet & lack of physical activity. Out of 223 women 164 received first dose of dmpa, while 2nd, 3rd and 4th or more doses was given to 29, 26 and 9 women respectively.

Present study was retrospective study conducted to see demographic details among DMPA users, along with side effect & compliance of Inj DMPA has no adverse effect on quantity, quality & composition of breast milk. DMPA is safe & highly effective, long term contraceptive without any interference with sexual intercourse.

When side effects occur they are usually weeks or months following inj DMPA. There are no serious side effects of DMPA but few women may experience some menstrual irregularities in form of irregular bleeding, prolonged bleeding or amenorhea. Counselling if done before & after administration of Inj DMPA regarding why menstrual changes occurs leads to higher patient satisfaction & compliance regarding why menstrual changes occur.

Many women stop using DMPA due to fear & misunderstanding about side effects. Majority of DMPA users in this study belonged to 21-25yrs age group. Our study was in agreement with previous studies conducted by Dr. Rani⁴ *et al.* & Nautyal⁵ in which mean age in study group was 25 ± 3.3 & 26.5 yrs resp. Most common side effect observed in DMPA users was menstrual disorder (62.3%). In study by M Fonseca & Husacher D incidence of unscheduled bleeding or spotting observed was 63% & 70% respectively. The result of present study was similar to these previous studies. 24.66% women were para 1 in our study while in study by Jain⁴ *et al.* noted 33% primipara women opted Inj DMPA. 25% women from study group were satisfied with DMPA & continued with subsequent doses. The only disadvantage of Depo Provera is that the injection cannot be removed if side effects or health

concerns arise.

Conclusion

MPA is highly effective, safe, long term reversible contraceptive option especially for post partum women. Patients satisfaction on continuing use of DMPA depend on counseling & reassurance during follow up especially regarding menstrual changes.

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