



## STUDY OF 100 CASES OF DEPOT MEDROXYPROGESTERONE ACETATE (DMPA).

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**ABSTRACT** 100 cases were studied from Aug 2013 to sept 2016 who were given DMPA 150mg deep IM in buttocks and repeated every three months for contraception. One case had endometriosis and she was given DMPA every two months. It was readily acceptable and continuation rate was high. It had a very few side effects in the form of amenorrhoea or spotting. Failure in the form of pregnancy occurred in two patients out of 100. One patient was given for endometriosis and she had significant improvement of symptoms in the form of amenorrhoea and pain relief. Two patients discontinued treatment due to spotting and one patient was given oc pills due to irregular period. Two cases of failure in the form of pregnancy was reported in my present study.

**KEYWORDS :** .Pregnancy, contraception, depot medroxyprogesterone acetate (DMPA).

### INTRODUCTION.

Depot medroxy progesterone acetate (DMPA) contains medroxy progesterone acetate, a derivative of progesterone as its active ingredient. Since FDA approval for contraceptive use in 1992, DMPA is used by several million women in US who choose it for its nearly 100 % effectiveness which is achieved with 4 inj. per year (kaunitz A M). When DMPA is administered IM to a women in recommended doses every three months, it inhibits the secretion of gonadotropins, which in turn prevents follicular maturation and ovulation and results in endometrial thinning. these actions produces it contraceptive effect. It can also be used in a few cases of endometriosis for symptomatic relief. It should not be used for more than two years if possible to decrease the effect on BMD. It may produce minor side effects like amenorrhoea or spotting with usually disappears after continuation of treatment. It is a very effective in prevention of pregnancy and is particularly useful in postpartum women as it has no effect on lactation and the period of lactational amenorrhoea coincides with DMPA induced amenorrhoea.

### AIMS AND OBJECTIVES.

Aim of this study is to confirm the effectiveness of DMPA as contraception, its acceptance, side effects and failure rates.

### MATERIAL AND METHODS.

Patients selected for DMPA as a contraception were given injection during first 5 days of period to rule out pregnancy. In postpartum patients it was given after ruling out pregnancy. 150 mg IM was given in gluteal region and repeated every 3 months or 13 weeks. One patient had endometriosis and she was given DMPA every 2 months. Follow up of the patients was done for side effects like spotting or amenorrhoea and regular check up was done for weight gain.

### OBSERVATION AND DISCUSSION.

#### 1. AGE.

Age group	18-25	26-30	31-35	36-40	40-50
No of patients	48	26	18	5	3

In my study most of the patients were in the age group of 18 to 30 yrs of age. This group consists of 74% of total patients. this is the age group which requires maximum protection from unwanted pregnancy;

#### 2. Parity.

parity	1	2	3	4	5	>5
No of patients	23	37	12	9	7	12

In my study most of the patient had either one or two children. They consisted of 60% of total patients.

#### 3. Rural/urban.

Rural patients	Urban patients	total
59	41	100

In my study 59 patients out of 100 were from rural area whereas 41 patients were from urban area. Hence it is obvious that it was more accepted in rural area as a contraception of choice as the public is

uneducated and cannot take oral contraception regularly in contrast to urban population.

#### 4. Changes in period.

Changes in period	No of patients.
amenorrhoea	27
spotting	14
No change	59
total	100

Total 41 patient out of 100 experienced changes in their regular periods in the form of amenorrhoea or spotting whereas 59 patients had no change in their period pattern. Hence it is obvious that DMPA does disrupt the regular bleeding pattern in patients who choose it as a method of contraception and patients should be properly counseled regarding it so that it becomes easy for them to continue the treatment. The disadvantage of DMPA are menstrual disturbance and weight gain after 1 year (Bigrigg A et al).

It is said that switching to cyclofem is a new option for DMPA users who are concerned about amenorrhoea (Piya Anant M et al.)

#### 5. Weight gain.

No of patients.	Weight gain
1	1kg
3	2kg
2	3kg
1	7kg.

In my study few patients had negligible weight gain which was observed for six months as shown above. only one patient had 7 kg of significant weight gain when on DMPA.

### DISCUSSION.

As per the above findings we may conclude that DMPA was a choice of contraception in women of age group of 18 to 30 yrs of age. This consists of 74% of total patients. Also 72% of total patients were para 3 or lower. 59 % of patients were from rural area suggesting that it was more acceptable method of contraception in rural women than urban age group. It requires no continuous motivation and hence more acceptable. 33% of all women were lactating suggesting that it was more acceptable in that period as it had no effect on breast milk secretion and has no adverse effect on baby. Also amenorrhoea induced by DMPA coincides with amenorrhoea induced by lactation hence it is more acceptable and indicated mode of contraception in lactating women.

Out of 100 women 41 patients experience changes in their regular periods in form of amenorrhoea or spotting. 27% of patients had amenorrhoea or oligomenorrhoea while 14% patient experience irregular spotting. For amenorrhoea patients were reassured regarding benign nature while for spotting which was prolonged patients were given treatment with estrogens which controlled it. Most of the

patients continued treatment while 2 patients discontinued treatment due to prolonged and irregular spotting not controlled with medications.

Weight gain was observed in first six months of period of treatment which did not show any significant changes in weight of the patients. Out of 100 patients only one patient had a weight gain of 7 kg in six months, while 2 patients had weight gain of 3 kg, 3 patients had weight gain of 2 kg and one patient had weight gain of 1kg. rest of the patients had no change in their original weight during the course of treatment.

Failure and discontinuation rate.

2 patients of my group had failure of treatment in terms of pregnancy. One patient was detected with 6 wks pregnancy and another with 8 wks of pregnancy inspite of continuous treatment.

3 patients discontinued treatment as they wanted to conceive, one patient was shifted to oral contraceptive pill due to severe spotting and irregular periods.

### RESULTS.

From the above study we may conclude that inj. DMPA is a very efficient mode of temporary contraception. It is very acceptable to both rural and urban population, more by rural as it does not require continuous motivation and education. It has a minimal side effects which can be easily controlled. Though it has been suggested that it decreases bone mineral density hence it should not be continued for more than 2 yrs as a continuous use and another mode of contraception should be suggested for bone recovery. Although the failure rate is low patients should be closely monitored for the signs and symptoms of pregnancy.

### CONCLUSION.

From the above study it may be concluded that DMPA is a very effective and safe temporary mode of contraception. It is very much acceptable to rural women and particularly in post lactational period. The side effects are very minimal and easily controllable and the failure rate is low. It is suggested that it should not be continued for more than 2 yrs for contraceptive purpose continuously as it may decrease BMD. Failure rate is low and discontinuation rate is also low with effective counseling of the patient. In my study weight gain during the course of treatment was not significant.

**CONFLICT OF INTEREST.** The author here declare that there is no conflict of interest.

### REFERENCES.

1. Bigrigg A et al. Br. J. Fam plan. 1999 Depoprovera . position paper on clinical use, effectiveness and side effects.
2. Kaunitz A M. Int. J Fertil womens med 1998-mar-apr. injectable DMPA contraception and update for US clinicians.
3. Leiman G. DMPA as contraceptive agent, its effect on Wt and BP Am J Obst Gynec 1972.
4. Piya Anant M et al. contraception 1998. Effectiveness of cyclofem in the treatment of DMPA induced amenorrhoea.