

ORIGINAL ARTICLE

Frequency of Various Side Effects and Early Removal of Progesterone Implant among Females Attending Family Planning Clinics

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ABSTRACT

Objectives: to determine the frequency of various side-effects and early removal of progesterone implant among females attending Family Planning Clinics.

Methodology: A total of 260 females aged 18 to 40 years presenting in the family planning clinic at Jinnah Hospital, Lahore for the follow up of progesterone implant inserted for less than 1 year were included in the study. Information regarding their demographic data were noted. The side-effects and early removal of the implant were noted and presented in frequency and percentages.

Results: Patients ranged between 18-40 years of age with mean age of 27.5±3.9 years. Majority of the females were para 2-3. Mean BMI of the females was 25.8±2.5. Side effects experienced during one year of insertion of implant were as follows: menstrual disturbance 34 (13.1%), irregular spotting 36 (13.8%), weight gain 16 (6.2%), headache 44 (16.9%) and acne 77 (29.6%). Early removal of implant reported by 52 females (20%). Stratification for age, BMI and parity was also carried out and results were statistically insignificant.

Conclusion: We found progesterone implant an effective method of contraception with less adverse effects.

Keywords: Contraception, Progesterone implant, Side effects, Early removal

INTRODUCTION

Current, contraception is considered as an effective and important health intervention for birth spacing, however, a large number of couples are still reluctant to use advanced method of contraception.[1]. It is seen that modern contraceptive methods are cost-effective in addition to have great potential for reducing maternal and child deaths.[2]. In our country, around 29 per 1000 women experience induced abortion.[3] It may be due to less rate of contraceptive use i.e. 35% and considering induced abortion a family planning tool.[4] The low contraceptive rates are mainly attributed to lack of education and fear of side-effects.

Currently Subdermal Contraceptive Implants (SCI) are available which provide 3 to 5 years of reliable contraceptive protection. Their insertion requires minor surgical procedure and is associated with better compliance as compared to daily pill. However, local studies regarding the side-effects of implants are scarce and provide limited information. A study conducted earlier reported only two side effects with the frequency of abnormal vaginal bleeding as 14.6% while incidence of pregnancy as 13% [5]. While another study reported no incidence of pregnancy during the study period rate with spotting as one of the most common complain (18%), followed by same frequency for irregular vaginal bleeding and weight gain in 12.2% of the females [6]. It was also seen that 18.3% of the females underwent early removal of the progesterone due to side effects [6]. International studies have reported weight gain as side effect of implant with a frequency of 5.6%, headache ranging from 10 to 20%, and acne in 27% of the patients but local literature doesn't report any of these adverse effects [7].

The rationale of this study is to determine the frequency of various side-effects and early removal of progesterone implant among females attending the family

planning clinic of tertiary care hospital. Since the local literature is scarce, this study will provide further information regarding the side effects and continuation rate in the local population. This will help clinicians to better understand the continuation trend and spectrum of adverse effects for the effective management and counseling of the clients to improve the compliance and contraceptive practices leading to improved maternal and child health.

METHODOLOGY

A total of 260 females aged 18 to 40 years presenting in the family planning clinic at Jinnah Hospital, Lahore for the follow up of progesterone implant inserted for less than 1 year were included in the study. Whereas with weight more than 80 kg at the time of presentation, chronic renal disease determined by presence of shrunken kidney on ultrasonography, chronic liver disease determined by coarse echotexture of liver, history of irregular menstrual bleeding before the insertion of the implant, determined by positive urine pregnancy test and those with history of use of an injectable hormonal method of contraception within the preceding 6 months were excluded from the study. Information regarding their demographic data were noted. The side-effects and early removal of the implant were noted. Confidentiality of the data was ensured.

RESULTS

Patients ranged between 18-40 years of age with mean age of 27.5±3.9 years. Majority of the females were para 2-3. Mean BMI of the females was 25.8±2.5. Side effects experienced during one year of insertion of implant were as follows: menstrual disturbance 34 (13.1%), irregular spotting 36 (13.8%), weight gain 16 (6.2%), headache 44 (16.9%) and acne 77 (29.6%). Early removal of implant reported by 52 females (20%).

Table 1: Side-Effects And Early Removal Of Progesterone Implant (N=260)

Side-Effects	No. of patients	%
Menstrual disturbance	34	13.1
Irregular spotting	36	13.8
Weight gain	16	6.2
Headache	44	16.9
Acne	77	29.6
Early implant removal	52	20

DISCUSSION

Controlling fertility is the most intimate and sensitive decision taken by couples. However, these decisions may affect the postpartum period which may be responsible for lifestyle, attitudes and women's priorities. In our population, initiating and making the choice of contraceptive method is unclear. Breastfeeding may influence the time and need of postpartum contraception. Upto 6 months, lactation can only be the contraceptive method, however, previous studies are evident for failure of this method. [8,9].

During lactational period, failure of method and non-use of modern contraceptive methods are the major causes of unplanned pregnancy. Previously, it is well-documented that delay in initiation of contraception and short inter-pregnancy intervals is responsible for adverse health of child and mother. [10,11,12].

All over the world, use of contraceptive implants is increasingly high to regulate the fertility. Due to most appealing feature (reversible long term use) most the users are attracted towards this method. However, it may cause menstruation disruption, removal and insertion complications, implant site infection. Here we reviewed these various complications.

In our study, when patients were evaluated for side effects experienced during one year of insertion of implant, acne (29.6%) was the most common side effect reported followed by headache 16.9%, irregular spotting (13.8%) menstrual disturbance (13.1%) and weight gain (6.2%). Early removal of implant reported 20%. Our findings are close to the results of previous studies by Sajid and Mehmood [5], Najma et al [6] and Ramdhan et al [7].

CONCLUSION

We conclude that progesterone implant is an effective mode of contraception in females seeking birth spacing and can be adopted in females seeking family planning. Physicians should be aware of the complications that can arise when inserting subcutaneous contraceptive devices,

though rare complications can occur. Physicians should be familiar with the correct technique, including appropriate anatomical placement and depth.

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