FREQUENCY OF COMMON COMPLICATIONS OF POST PLACENTAL INTRAUTERINE CONTRACEPTIVE DEVICE IN PREGNANT WOMEN POPULATION OF D.I.KHAN DIVISION OF PAKISTAN.

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### ABSTRACT

**INTRODUCTION:** Pakistan is the sixth most populous country with an estimated population of 180 million in 2012. In 1953 and 1960, Pakistan launched private and public contraceptive programs (FPs), respectively. The prevalence of contraception (CPR) increased by only 0.25% each year until 1990. The results of this study are specifically published in the literature to understand the seriousness of the problem and to provide field supervisors to make the necessary and timely decisions on the use of IUCDs after placenta. OBJECTIVE: To determine the frequency of common complications of postplacental intrauterine devices in pregnant women in the Pakistani division D.I.KHAN. MATERIALS AND METHODS: Descriptive research by Gomal Medical, D.I. Conducted in gynecology and obstetrics. In this study, a total of 254 patients were followed during the 6 months from March 4, 2017 to September 4, 2017. All patients woke up with a detailed medical history and laboratory tests, and routine tests were removed from all patients. A post-placental IUCD was placed. All patients were carefully evaluated after 1 month for common postplacental IUCD complications such as dropout, bleeding, and pain. All observations were performed under the supervision of an experienced CPSP obstetrician and gynecologist, and all laboratory tests were performed by an experienced pathologist with at least 5 years of experience. **RESULTS:** During this study, the average age was 27 + 11.26 SD years. Forty-two percent of patients were first-born and 58% of patients were multiparous. In addition, 10% of patients were expelled, 15% were bleeding, and 12% were in pain. CONCLUSIONS: Our study found that bleeding (15%), followed by pain (12%) and dropout (10%) were the most common complications in pregnant women treated with postplacental intrauterine prophylaxis. I concluded.

**KEYWORDS:** complications, post-placental, intrauterine device, pregnant women. Department of Gynecology and Obstetrics, Gomal Medical, D.I. Khan.

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#### **INTRODUCTION**

With an estimated population of 180 million in 2012, Pakistan is the sixth most populous country in the world. Pakistan launched a planning program (FP) in the private sector in 1953 and in the public sector in the 1960s, but the prevalence of contraception (CPR) increased by only 0.25% each year until 1990. CPR increased rapidly from 12% in 1990 to 33% in 2000. Much of this increase is occurring in rural areas and in traditional ways. Within the next decade, CPR shrank again to 30% in 2006. 7.1 Of the approximately 24 million married women of childbearing age (MWRA), 17 million do not use FP. FP and 300,000850.000 women a year often use the FP method to seek abortion. Post-placental IUCDs have been reported since 1960 and have been increasing in popularity ever since. <sup>1,2</sup> Recently, the use of postplacental IUCD has become widespread and clinical studies are being conducted<sup>3,4</sup>. Effective advice and the availability of safe, economical and easy contraception immediately after childbirth can reduce unwanted pregnancies. <sup>4</sup> Fashionable IUCDs are very effective and safe. A fast, reversible contraceptive method with few side effects, long-acting, sexually independent. This is the cheapest method of contraception available today. Many women also find the IUCD very convenient because it requires little action once they are in the field. <sup>5</sup> Childbirth prevention can prevent almost one-third of maternal mortality and 10% of infant mortality if the couple continues to become pregnant every two years.<sup>2</sup> Postnatal Planning (PPFP) is the prevention of unwanted, tightly spaced pregnancies during the first 12 months after delivery.<sup>2</sup> Postpartum women need effective methods contraceptive to prevent unpredictable pregnancies in the short term. The introduction of an intrauterine device (IUCD) immediately after 5 or 6 births is recommended by the WHO and is one of the safest and safest methods. An effective method of temporary contraception. Within the immediate postpartum period, women very motivated and want are good contraceptive methods so that their children can be dealt with in a relaxed way and without fear of unwanted pregnancies 17, injections 19%., IUD 3%, Condom 55% Risk of adverse events such as expulsion, pain and bleeding. The likelihood of these complications after postplacental IUCD was 13% expulsion of Pakistan, 7.6% bleeding, and 5.9% pain department.

# MATERIALS AND METHODS

Study setting, design and duration; this study was conducted by Gmal Medical, D.I. It was carried out in the obstetrics and gynecology department of. Chief of the clan. The study design was a descriptive case series with a duration of 6 months from March 4, 2017 to September 4, 2017. We investigated complications. Three complications were considered if discovered after one month of follow-up. 1) Bleeding: Amount confirmed by IUCD and ultrasound 2) Excretion: Also confirmed by ultrasound when moving the device 3) Pain: The patient feels pain thanks to the IUCD, almost 1 on a visual analog scale When it was a point. Population, sample size and method, and sample selection: Our geographic area is D.I. Khan Division, D.I. Khan&Tank District, South Waziristan Agency, Frontier Region of Darazinda. The population of this sector was estimated to be about 2.5 million in 2016. Assuming a population of 47% (> 19 years) of adults, the adult population at risk for IHD is 1,175,000. As shown by Abbas et al.<sup>7</sup>, it was assumed that 6.25% had IHD. NS. 73,438 adults. Sample size and

sampling method: The sample size was 254, with a 5.9%, 95% confidence level of postplacental post-IUCD pain, and a 2.9% margin of error with WHO software to determine the sample size. An ongoing (impossible) sampling technique was used. Sample selection; Sample selection selection criteria were supported by "all pregnant women of the birth age of 1545 who give birth at birth". The exclusion criteria were supported in two ways, but 1) all other overlooked and incomplete abortions were excluded. 2) Patients with a history of bleeding disorders. The above conditions acted as confounders and, if included, biased the study results. Data collection procedure This study was conducted with the approval of the hospital's Ethics Research Committee. All patients who met the selection criteria were enrolled in the study through the OPD / ER department and admitted to the ward for further examination. The purpose and benefits of the study were explained to all or all patients and written consent was obtained. All the patients were excited about their detailed medical history and laboratory tests, and all routine tests were exhausted. A post-placental IUCD was placed. All patients were carefully monitored for common postplacental IUCD complications such as dropout, bleeding, and pain after 1 month. All observations were performed under the supervision of an experienced CPSP obstetrician and gynecologist, and each laboratory test was performed by an experienced pathologist with at least 5 years of experience. All of the above information was recorded in a very pre-designed proforma and addressed confounding factors and biases in the study results according to strict exclusion criteria. Data analysis The data was analyzed using software SPSS version 10.0. Descriptive statistics such as mean + variance were calculated for age and evenness. Frequency and percentage were calculated for qualitative data such as frequent complications (excretion, bleeding, pain). Frequent complications were stratified according to age and birth history to determine changes in efficacy. A poststratified chi-square test was applied and the p-value & lt; 0.05 was considered significant. All results were presented in table and graph style.

# RESULTS

In this study age distribution among 254 patients was analyzed as 173(68%) patients were in age range of 15-30 years, 81(32%) patients were in age range of 31-45 years. Mean age was 27 years with standard deviation  $\pm 11.26$  (Table 1).

| Table 1: Age distribution of patients |                      |            |  |  |
|---------------------------------------|----------------------|------------|--|--|
| Age                                   | Frequency<br>(n=254) | Percentage |  |  |
| 15 - 30 years                         | 173                  | 68%        |  |  |
| 31 - 45 years                         | 81                   | 32%        |  |  |
| Total                                 | 254                  | 100%       |  |  |

Mean age was 27 years with standard deviation  $\pm 11.26$ .

Status of parity among 254 patients was analyzed as 107(42%) patients were primi para while 147(58%) patients were multi para (Table 2).

| Table 2: Parity distribution of patients |                             |      |  |  |
|--|-----------------------------|------|--|--|
| Parity                                   | Frequency(n=254) Percentage |      |  |  |
| Primi                                    | 107                         | 42%  |  |  |
| Para                                     | 107                         |      |  |  |
| Multi                                    | 147                         | 58%  |  |  |
| Para                                     | 147                         |      |  |  |
| Total                                    | 254                         | 100% |  |  |

Common complication among 254 patients was analyzed as 25(10%) patients had expulsion, 38(15%) patients had bleeding while 30(12%) patients had pain (Table 3).

| Table 3: Common complications amongpatients |                      |                |  |
|---|----------------------|----------------|--|
| Common<br>complicatio<br>ns                 | Frequency(n=2<br>54) | Percenta<br>ge |  |
| Expulsion                                   | 25                   | 10%            |  |
| Bleeding                                    | 38                   | 15%            |  |
| Pain  | 30                   | 12%            |  |
| Total                                       | 254                  | 100%           |  |

Stratification of Common complication with respect to age and parity is given in Table 4 and 5.

| Table 4: Stratification of common<br>complication with respect to age<br>distribution (n=254) |         |                        |                        |           |                 |
|---|---------|------------------------|------------------------|-----------|-----------------|
| Commo<br>complica<br>s  |         | 15-<br>30<br>year<br>s | 31-<br>45<br>year<br>s | Tota<br>l | P<br>value<br>s |
| Expulsio  | Ye<br>s | 17                     | 8                      | 25        | 0.990           |
| n   | No      | 156                    | 73                     | 229       | 0               |
| Total   |         | 173                    | 81                     | 254       |                 |
| Bleedin   | Ye<br>s | 26                     | 12                     | 38        | 0.964<br>4      |
| g   | No      | 147                    | 69                     | 216       | 4               |
| Total   |         | 173                    | 81                     | 254       |                 |
| Pain  | Ye<br>s | 20                     | 10                     | 30        | 0.856           |
|   | No      | 153                    | 71                     | 224       | 6               |
| Total   |         | 173                    | 81                     | 254       |                 |

| complication with respect<br>distribution (n=254Common<br>complicationsPri<br>mi<br>ti<br>DameCommon<br>complicationsPri<br>Pri | -   | ity<br>P<br>value |
|---|-----|-------------------|
| Common<br>complicationsPri<br>miMul<br>ti   | Tot | -                 |
| Para   Para   Para  |     | s                 |
| Expulsi S 11 14   | 25  | 0.841             |
| on No 96 133  | 229 | 5                 |
| Total 107 147   | 254 |                   |
| Bleedin Ye 16 22  | 38  | 0.997             |
| <sup>g</sup> No 91 125  | 216 | /                 |
| Total 107 147   | 254 |                   |
| YeYePains1317   | 30  | 0.886<br>5        |
| No 94 130   | 224 | 5                 |
| Total 107 147   | 254 |                   |

#### DISCUSSION

With an estimated population of 180 million in 2012, Pakistan is the sixth most populous country in the world. Pakistan launched a planning program (FP) in the private sector in 1953 and in the public sector in the 1960s, but the prevalence of contraception (CPR) increased by only 0.25% per year until 1990. CPR increased rapidly from 12% in 1990 to 33% in 2000.8-12 Much of this increase is occurring in rural areas and in traditional ways. CPR shrank again over the next 10 years, reaching 30% in 2006. 7.1 Of the approximately 24 million married women of childbearing age (MWRA), 17 million do not use FP. In addition, 300,000 to 850,000 women perform abortions once a year using the FP method <sup>12.</sup> According to our study, the mean age was 27 years and the variance was  $\pm$  11.26. Forty-two percent of patients were first-born and 58% of patients were multiparous. Over 10% of patients were expelled, 15% bleeded, and 12% lt pain. Tatum HJ et al<sup>13</sup> found that the overall cumulative exclusion rate in their study was 16.2%, bleeding 12%, and pain 13%. According to Bhalerao et al<sup>11</sup>. The dropout rate was 16.4%, bleeding was 15%, and pain high incidence was 12%. The was considered because some women's uterus is atrophied and bulky, and there is only one size 1 IUD available for insertion. In addition, introductions during a caesarean section have a lower yield rate than introductions during the postpartum period (first 48 hours). Postplacental IUCD complications were 10% excretion, 9% bleeding, and 7% pain. Similar results were observed in another study by Kapp N et al.<sup>8</sup>, but postplacental IUCD inserts may increase

the risk of adverse events such as excretion, pain, and bleeding.<sup>15</sup> The incidence of postplacental IUCD complications was 13% excretion, 7.6% bleeding, and 5.9% pain. Expulsion rates by PPIUCD vary from 617%. In this study, the 6% excretion rate of the PPIUCD group is comparable to that of Gupta et al.<sup>16</sup>. Compared to PPIUCD, transcaesarean section excretion rates are lower in this study, also due to the placement of the IUD directly on the fundus during cesarean section compared to vaginal inlays. In our study, complications were observed in 18% (9 women) who opted for immediate postpartum insertion (Group A). Within the interval group (Group C), bleeding was the most common complication observed in 2 cases (4%), but within the Caesarean section group (Group B), the observed complication, or bleeding (bleeding). There was no significant difference in 2%). ) and pain (2%). In this study, EL Beltagy et al<sup>17</sup>. Two cases of PGD were reported, one for a blood group and one for group C. No increase in PID incidence has been reported after IUCD placement immediately after childbirth. No cases of perforation were reported in the group.<sup>18</sup> This reduced risk of uterine perforation may also be due to the thick wall of the uterus. No failure rates have been reported within the three groups.

#### **CONCLUSION**

Our study concludes that the incidence of more common complications is in pregnant women treated with postplacental intrauterine devices. NS. Refusal, 10%, bleeding 15%, pain 12%.

ETHICS APPROVAL: The ERC gave ethical review approval

CONSENT TO PARTICIPATE: written and verbal consent was taken from subjects and next of kin

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OF **INTEREST:** CONFLICT No competing interest declared.

# REFERENCES

- 1. Khan AA, Abbas K, Hamza H, Bilal A, Khan A. From Contraceptive Prevalence to Family Planning Service Users: Implications for Policy and Programs. J Pak Med Assoc. 2013;63(4)l;S11-5
- 2. Levi E, Cantillo E, Ades V, Banks E, Murthy A. Immediate post placental IUD insertion at cesarean delivery: A prospective cohort study. Contraception. 2012; 86:102-5.
- 3. Shukla M, Chandrawati OS. Post placental intrauterine device insertion-a five year experience at a tertiary care center in north India. Indian J Med Res. 2012; 136(3):432-5.
- 4. Chhari A, Zutshi V, Sharma R, Batra S. Comparison of post placental IUD with Int IUD. interval J ReprodContraceptObstet Gynecol. 2015 Aug;4(4):1090-3
- 5. Celen S, Sucak A, Yildiz Y, Danisman N: Immediate post-placental insertion of an intrauterine contraceptive device during caesarean section. Contraception. 2011; 84:240-3.
- 6. Kittur S, Kabadi YM. Enhancing contraceptive usage by post-placental contraceptive intrauterine devices (PPIUCD) insertion with evaluation of safety, efficacy, and expulsion. Int J ReprodContraceptObstetGynecol 2012; 1:26-32.
- 7. Suri V. Post placental insertion of intrauterine contraceptive device. Indian J Med Res. 2012;136:370-1
- 8. Kapp N, Curtis KM. Intrauterine device insertion during the postpartum period: a systematic review.Contraception. 2011;80:327-36
- 9. Chi IC, Wilkens L and S. Roger. Expulsions in immediate postpartum insertion of Lippes Loop D and Copper T IUD's and their counterpart Delta devices-an epidemiological analysis. Contraception 1985; 32:119-134.
- 10. Khan ME, Patel BC. Male involvement family planning: a knowledge, in attitude, behaviour and practice survey of Agra district. New Delhi: population council, 1997.
- 11. Bhalerao AR, Purandare MC. Postpuerperal Cu-T insertion: a prospective study. J Postgrad Med 1989; 35:70.
- 12. Choudhary, R.H. The influence of female education, labour force participation & age at marriage on Fertility Behaviour in Bangladesh Social Biology, 31 (1-2): 59-74, 1984.
- 13. Tatum H J, Beltran RS, Ramos R, Van Kets H, Sivin I, Schmidt FH. Immediate postplacental insertion of GYNE-T380

and GYNE-T380 postpartum intrauterine contraceptive device. Am J Obstet Gynecol 1996 Nov-175(5)1231-1235.

- Alvarez pelayo J, B orbolla Sala ME. IUD Insertion during caesarean section and its most frequent complication. Ginecol Obstet Mex 1994; 62:330-5.
- 15. Kapp N, Curtis KM. Intrauterine device insertion during the postpartum period: a systematic review.Contraception. 2011; 80:327–36.
- 16. Gupta A, Varma A, Chauhan J. Evaluation of PPIUCD versus interval IUCD (380A) insertion in a teaching

hospital of Western UP. Int J Reprod Contracept Obstet Gynecol. 2013; 2(2):204-8.

- El Beltagy NS, Darwish EA, Kasem MS, Hefila NM. Comparison between cupper T380 IUD and multiload 375 IUD in early post-partum insertion. Middle East Fertility Society J. 2010; 16:1438.
- Eroglu K, Akkuzu G, Vural G, Dilbaz B, Akin A, Taskin L, et al. Comparison of efficacy and complications of IUD insertion in immediate post placental/early postpartum period with interval period: 1 year follow-up. Contraception. 2006; 74:376-