



The prevalence of infection in women using IUDs

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ABSTRACT

Nowadays over 153 million women use IUD in worldwide, as contraception. Long-term, high effective, and cost effective are advantages this method. This study was conducted to access side effects and prevalence of them of IUD_{380A} during a 6-month period. This descriptive cross sectional study with use of continued method conducted on 125 candidates applied for IUD insertion. The side effects were recorded in the following 1,2,3,6 months after use of the method in the questionnaires. Statistical analysis was performed using Students' t-test, fisher and chi-squared test where appropriate. Data were analyzed by SPSS software. Results: Side-effects were included: bleeding, pain, infection, spontaneous expulsion, and unintended pregnancy. Bleeding, pain and spontaneous expulsion were more frequently happened during the first month, and infection was more commonly complication during 2nd month of implantation. However after 6 months, all side effects were in lowest range. Continuation rate was over than 90% for these users. According the findings of the present study, the side effects included bleeding; pain, infection and spontaneous expulsion were decreased over time, in CuT380A users. Considering the safety of this method and the low unintended pregnancy rate among the other contraception methods, the use of this IUD is recommended.

Keywords: Side effects, IUD CuT_{380A}, Continuation rate

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INTRODUCTION

IUD is one of modern contraception methods that more than 153 million women through the world use it due to its long-lasting and high effective in preventing conception, start of working almost immediately [1]. The ability of quick and rapid return to fertility after removing and its low cost compared with other methods [1, 2]. Hubacher and Grimes believe that IUDs not only are a safe and effective method, but create health benefits that are unaware most women and physicians about it [3]. Benshushan et al by their study concluded that IUD decrease risk of endometrial cancer [4]. TCU380 A is one of the common types a long with a polyethylene mould, Barium sulfate, and delicate winding around the stem and copper ties on both arms that creates a surface of 380 mm². Its life-span is about 12 years. Its failure has been reported 0.3 to 0.8 percent [1, 5]. As other contraception methods, IUD is with side effects that are limited

primarily to the uterus and include: cramps, spotting, infection, heavy bleeding and spontaneous expulsion [2]. Bishop et al also announced that according to their study in most cases, the reasons for early removal of TCU380A are pain and bleeding [6]. Above Mentioned complications can impact on discontinuation the use [7]. This survey assesses prevalence of TCU380A side effects in women who was referred to a clinic in Iran, Kashan city. Given the common complications of IUD such as an increase in bleeding, slight pain in menstruation, and spotting, this study focused on cases of bleeding, or infection that have caused their referral to the health workers and have required the removal of IUD.

MATERIAL AND METHODS

Present study was a descriptive cross sectional and conducted on 125 women who requesting the use of IUD as a method of preventing pregnancy. Samples were selected by continuing method in a clinic from January 15 2015 to 25 Aug 2015. It should be mentioned that they had the qualifications and criteria for acceptance,

The criteria (inclusion) were included: having at least one and at most three labors, natural pop smear, lack of: active pelvic inflammation diseases, irregular uterine bleeding, dysmenorrheal, heart valve diseases or genital organ malign, sexually transmitted disease (STD) and sensitivity to copper, surgery on uterine tubes. women with one of 3 followed signs, mucus purulent discharge (yellowish discharge containing mucus and pus), the cervix bleeds easily when touched with a swab, or a positive swab test (a swab of cells collected from the cervical canal appears yellow when held against white paper), were treated, and was delayed IUD insertion until she completed the full course of treatment and no longer showed any sign of infection [1]. In addition, if there was any vaginitis such as: Candida, trichomoniasis, or bacterial vaginosis, in order to treatment, was prepared a Wet Smear [2]. Data collection tool

was questionnaire regulated information according to the study objective. The data were collected through interview and related information was obtained through clinical examinations and was recorded in questionnaire. The questionnaire consisted of two sections: the first part questions on the demographic features of samples and the second part contained information obtained from women through clinical examinations and also information obtained in the first, second, third, and fourth visits after planting IUD. Sampling was done during eight months. In this visits the side effects of IUD including pain, bleeding, infection, spontaneous expulsion, unintended pregnancy and continuing of method, was studied. To analyze the data we used, descriptive statistics, chi-square, T-test, and Fisher test.

Table 1: Parturient demographic detail

Variable	(N (%)	Mean± SD
Age(year)	≤ 25	23(18.5)29.67 ±6.24
	25-29	40(32.3)
	30-34	34(27.4)
	35≥	27(21.8)
BMI(19.8-26)	Less than normal	8(6.7) 24.44±3.14
	Normal range	74(62.2)
	Over weight	28(23.5)
	More than 29	9(7.6)
Non Breastfeeding	No	96(78)
	Yes	27(22)
Parity(number)	1	53(42.7)1.79 ± 0.83
	2	48(38.7)
	3 or more	23(18.5)
Past Delivery (number)	1	54(43.5)1.70±0.68
	2	54(43.5)
	3 or more	16(12.9)

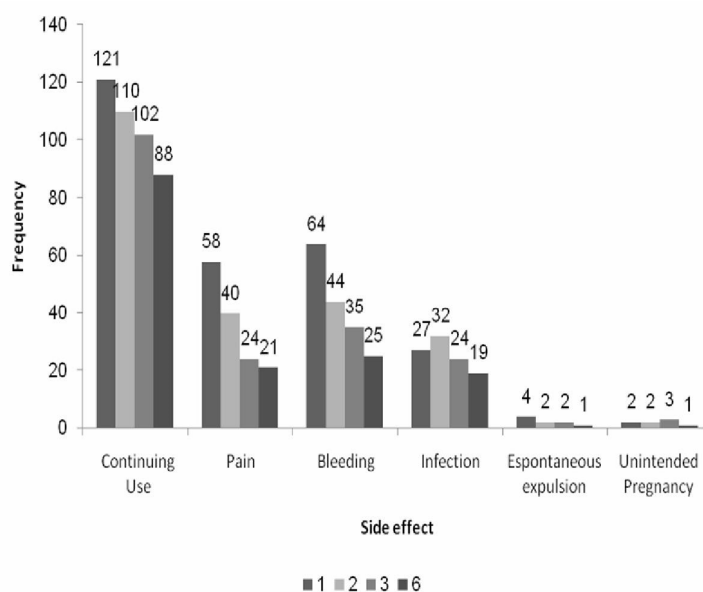


Figure 1: Prevalence of side effects of IUD_{380T} in different months after plantation

RESULTS

The personal specification has shown in table 1. According to the results of the study and as seen in chart 1, the highest percent of bleeding cases (51.6%) occurred during the first month after IUD plantation, also for spontaneous expulsion the highest rate occurred in first month. Pain was as the second prevalence among the side effects. The highest percent of pain occurred in the first month and the lowest one observed after six month. The highest percent of continuing use of the method and infection were seen in first and second months after IUD plantation. Concerning the unintended pregnancy was resulted of method's failure rate, the highest rate occurred during the third month after IUD plantation (chart 1).

DISCUSSION

The study findings revealed that the highest percent of bleeding and pain occurred in the first month after plantation that could be contributed to the endometrial inflammation during menstruation and the attempt on the side of endometrium for repelling external body (IUD) in early plantation period. However, with increase of time, bleeding and pain intensity much more reduced, so that after 6 month, they were in the lowest range. Kurzikh also obtained similar results in this regard [8].

Most samples would like to continue the method, however the highest per cent stopping use (11.8%), was observed after 3 months. continuing use of the method much more increased with increase of time. It could be due to decrease of bleeding after 3 months. More samples that would like to continue the method stated that it is due to gradual decrease of bleeding. Haugan et al in a study on 957 samples found that bleeding and pain were among the reasons for stopping the use of IUDs[7]. Tolley et al, in a six-month study found that the rate of bleeding due to IUD has a considerable influence on the continuation of the methods, that is, the more the bleeding as a result of using IUD, the more willing the health workers will be to stop its use. The highest per cent of infection was reported during the second month after plantation. In the study conducted by Wu and et al similar results were obtained. Grimes believe that in Cu IUDs smallness of them could be influential in decreasing infection [11]. Given the result of present study, considering bleeding and pain were decreased over the time, it is recommended that women affected by bleeding

pain or infection due to using Tuc380A IUD, with timely referral to the clinic, and proceed to treatment methods should continue [12- 15]. As during this study piercing the uterine and ectopic pregnancy were not observed, it seems necessary to conduct a long – lasting research in order to compare other complications. Considering the point that newer types of IUD have been made to prevent pregnancy, it is recommended that other studies be conducted in order to compare this IUD with newer types of IUD such as Gyne Fix and IUS.

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Conflict of Interest

The authors have no conflict of interest to disclose.

Authors' Contribution

Alireza Sharif developed the study concept and design and the acquisition of data, interpretations of data, and drafting of the manuscript. Mohammad Reza Sharif, Mansoor Momen-Heravi, Hanieh Mohammadi and Zahra Soleimani developed the protocol, analysis of data and drafting of the manuscript.

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