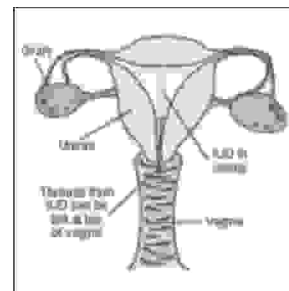


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CU-375 (MULTILOAD); A SAFE, CHEAP & EFFECTIVE METHOD FOR REVERSIBLE LONG-TERM CONTRACEPTION



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ABSTRACT... Objectives: To study the complications associated with the use of multi-load CU375 and reasons for discontinuing its use. **Design:** Descriptive Study. **Place and duration of study:** From 10th January 2002 to 10th January 2004. Private Clinic: Saleem Medical Complex Quetta. **Patients & Methods:** The study population included 100 women aged 22 – 35 years requiring contraception in the form of multi-load CU 375. Patients and in some cases their husbands were counseled and selected according to a pre-set proforma. **Results:** Out of 100 patients the mean age of the acceptors was 30 years and mean parity was 4. Insertion of the device was very easy, main complications were disturbed menstrual cycle, heavy menstrual bleeding experienced by 40%, inter-menstrual spotting by 8% and continuous vaginal bleeding by 3%, 2% of the patients had gestational ammenorrhea of 8 & 12 weeks. Vaginal discharge was complained of by 10%. There were two expulsions and 7 removals, reasons for removal were metrorrhagia, menorrhagia, pain and spotting in most cases. There were no cases of perforation or ectopic pregnancy. **Conclusion:** It was concluded that multi-load CU 375 is an effective contraceptive device with menstrual irregularities and pelvic inflammatory disease being the main complications and principle causes for removal of IUCD.

Key words: Female contraception-CU375-Complications of IUCD

INTRODUCTION

Intrauterine Contraceptive Devices (IUCD) have been used as an effective, safe, and economic contraceptive method for many years¹. Although mechanism of action of the IUCD is controversial, many recent reports have suggested that the IUCD prevent implantation of the fertilized ovum or cause spermicidal activity in the intrauterine cavity².

There is wide variation in contraception prevalence

worldwide ranging from 8% of women aged 15-49 years in western Africa upto 78% in northern Europe³. Female sterilization (32%), intrauterine devices (22%), and the oral contraceptive pill (14%) account for more than two thirds of all contraceptive practices worldwide. In less developed countries 70% of contraception users rely on female sterilization and intrauterine devices in part because they are advocated by healthcare providers as a result of cost effectiveness in terms of pregnancy prevention and service provision⁴.

Since the introduction of the IUCD, many complications such as dysmenorrhea, hyper menorrhea, pelvic infection, pregnancy, septic abortion, uterine perforation and migration into adjacent organs have been reported⁵⁻⁶.

This prospective study was designed to observe various complications of IUCD use in Pakistan including identification of menstrual irregularities, pelvic infections, perforation, ectopic pregnancy reasons for removal of IUCD, and to suggest recommendations for their management. All the data obtained was filled in pre-designed proforma and compiled on computer data base.

MATERIAL AND METHOD

This study was conducted from 10th January 2002 to 10th January 2004 at private clinic Saleem Medical Complex Quetta.

All the patients having IUCDs inserted during the study period and having follow up of at least one year were included in this study. Patients were interviewed, counseled and chosen according to pre-designed proforma. A note was made of any complication occurring during insertion, or in long term period e.g. Perforation, heavy bleeding, infection or pregnancy. The time period between insertion and spontaneous expulsion or removal and reason for discontinuing IUCD is also noted down.

RESULTS

One hundred patients were enrolled during the study period. The mean age of the patients was 30 years.

The mean parity was 4. Of the 100 patients 60% were uneducated and 40% educated. In the uneducated group of patients 80% of the husbands were educated, while in the educated group all the husbands were educated. The last born was 2 – 8 months before inserting IUCD. Mode of delivery in previous childbirth was vaginal in 94 cases while caesarian section in 6 cases; out of caesarian cases group one patient had 2 previous caesarian sections. (Table III).

The majority of the patients 48% belong to Rs.6000 – 8000 per month income group. With regard to complications of IUCD the major complication was menstrual disturbances as shown in table IV. 45% had regular menstrual cycle, while 40% experienced heavy menstrual flow (Table IV).

Table-I Age of patients using IUCD.

Age	No. of Patients	%age
< 25	22	22%
26 – 30	44	44%
31 – 35	34	34%

Table-II Parity of patients using IUCD

Parity	No. of patients	%age
< 3	20	20%
3 – 5	70	70%
> 5	10	10%

Table III Mode of delivery in previous child birth (total cases 100)

Vaginal	Previous one Caesarian	Previous two Caesarian
94	5	1

Table-IV Menstrual cycle of patients using IUCD

No. of Pts	Regular periods	Heavy flow	Continuous bleeding	Inter Menstrual spotting	Scanty periods	Gestational Amenorrhea
100	45	40	3	8	2	2
%age	45%	40%	3%	8%	2%	2%

The average number of days of menstrual flow after insertion of IUCD were 22.5 days + 3.1. The other major complications as shown in table V were vaginal discharge complained of by 10% and lower abdominal

pain by 4%. Although mild lower abdominal pain and slight vaginal bleeding occurred in majority of patients but one patient had severe vaginal bleeding during insertion which required injectable antifibrinolytic agent

(Inj. Tranexamic acid 1 gram stat) and had to keep the patient under observation for 6 hours. IUCD was spontaneously expelled in 2 women while 7 patients requested for removal. In 2 cases it was removed due to pregnancy.

DISCUSSION

Intrauterine contraceptive devices (IUCDs) have not suffered from the same negative influences in the developing world as in the world. The method has too many basic advantages to be gainsaid including, most importantly, that it has the lowest lifetime cost of any effective method of contraception, and that user compliance is not an issue once the device is in place⁷.

The mean age of patients in the study was 30 years, while the mean parity was 4. This correlates with another study carried out at Lahore⁸. Like in many other countries women in our area are unable to make autonomous decision about their sexual and reproductive health because of political instability within society, lack of economic independence, and prevailing cultural or religious attitudes to women's rights⁹. Therefore majority of our patients were not educated but their husbands were educated and had awareness about IUCD through the media, relatives friends and

very few by doctors.

The methods was preferred by patients having more than 4 children and belonging to middle socio-economical class which fits our women as an ideal candidate for IUCD⁸. As documented in other studies menstrual irregularities was the main complication in the study, which was managed conservatively. With the arrival of new hormone releasing devices like Levonovas this complication can be over taken but it is quite expensive¹⁰.

Table - V other major complications associated with IUCD

Complications	No of pts	%age
Vaginal Discharge	10	10%
Lower Abdominal Pain	4	4%
Spontaneous expulsion	2	2%
Request for removal	7	7%
Uterine perforation	-	-
Gestational Ammenorrhea	2	2%
Ectopic Pregnancy	-	-

Table-VI Reasons and time interval of discontinuation of IUCD.

No. of cases	Heavy Flow	Irregular Bleeding	Continuous P/V bleeding	PID	Pregnancy
11	4	2	1	2	2
Time period (Months)	5 - 11	4 - 10	3. 5	10	2 - 3

Heavy bleeding in the first three months after insertion is quite common therefore patient must be properly counseled on this point. Heavy bleeding beyond this point is the main documented reason for removal.¹¹⁻¹² As recommended by WHO SPR we provided a short course of non-steroidal anti-inflammatory drugs (NSAIDs), during the days of bleeding, to treat spotting or light bleeding¹³. Heavier and longer menstrual bleeding was treated with NSAID (mefenamic acid) or antifibrinolytics (tranexamic acid). This approach is supported by small clinical trails¹⁴⁻¹⁵.

Next in frequency was pelvic inflammatory disease

causing vaginal discharge and lower abdominal pain. This problem can be reduced by proper selection of patients and sterilization of instruments. Prophylactic antibiotics are not recommended for routine IUCD insertion¹³ therefore we did not provided prophylactic antibiotics.

Request for removal of IUCD in this study was mainly due to heavy, irregular bleeding and PID which correlates very well with other studies.¹¹⁻¹² The spontaneous expulsion of IUCD was seen in 2% of cases in this study. While in literature it has been documented as 2 - 8.2% and is most common in the

first three months after insertion and usually during menstruation¹². The improvement in results is due to the smaller size of IUCD clinical skill, proper selection of patients and proper time of insertion of IUCD¹⁶.

Uterine perforation occurs in fewer than 1000 insertions^{12,16}. In this study no case of perforation occurred. Previous Caesarian section is not a contraindication for IUCD insertion. We inserted CU375 in 6 women 5 of them had previous one caesarian section while one patient had previous two caesarian section.

In this study pregnancy occurred in 2% of the cases, this correlates with the cumulative pregnancy rate of 1.95 per 100 women years⁸. In both the cases IUCD was removed after the diagnosis of pregnancy, as women with an intrauterine pregnancy and an IUCD in situ should be informed of an increased risk of second trimester miscarriage, pre-term delivery and infection if the IUCD is retained. Removal of IUCD reduces these risks, but entails a small risk of miscarriage¹⁷⁻¹⁸.

CONCLUSION

It is concluded that multi-load CU-375 is highly effective, safe and has the lowest lifetime cost in the properly selected cases. Irregular heavy vaginal bleeding and PID being the principle reasons for discontinuation of IUCD use.

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