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Short Communication

Nonpalpable intrauterine device threads: Is it a cause for worry?

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ABSTRACT

Background: Intrauterine contraceptive device is a popular and effective method of contraception. It can be inserted either as an interval procedure or after abortion or delivery. Threads are attached to the vertical limb so that the user can find out the location of the device. Sometimes the threads are not palpable by the user; this study was conducted to find out the reasons for inability to palpate the threads.

Methods and results: The retrospective study was conducted over a period of eight years; 110 female patients who complained of inability to feel the threads were included in the study. In most of the cases the device was in the right place. In four cases the device could not be felt on uterine sounding; this could have been due to subendometrial placement of the device. There was no case of perforation by the device.

Conclusion: Inability to feel the threads is a common complaint by the patients who are using intrauterine contraceptive device. In most of the cases the device was in correct position and could be localized by clinical examination. Ultrasonography can help in localization of the device; if used at the time of insertion it can confirm proper insertion and location of the device. This will reassure the client and the health care providers.

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Introduction

An ideal contraceptive is the one which always prevents pregnancy, does not interfere with sexual act or pleasure, is reversible, effective for a long time, does not require too many visits to the hospital, has almost no side effects or complications; is cheap and preferably freely available through government supply. intrauterine contraceptive device (IUCD);

commonly known as Copper T; is the closest to an ideal contraceptive. IUCD has been used as a safe and effective method since 1965.¹ IUCD is acceptable to most couples due to its safety, cost effectiveness and convenience of use.² There are approximately 128 million women all over the world using IUCD.³ It is the most suitable contraceptive for spacing.

The mechanism of action of IUCD is at multiple sites; making the female genital tract hostile to sperms and ovum thereby making it highly effective. Addition of copper on the

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intrauterine device has made it more effective. It can be inserted any time as an interval procedure provided pregnancy has been ruled out, after abortion or immediate postpartum. It can also be used as an emergency contraceptive (EC). Return of fertility after its removal is almost immediate. All IUCDs have threads which help in removal of the device, reassures the correct placement and retention. The threads may have some contraceptive effect too. IUCDs have been associated with some complications like dysmenorrhea, menorrhagia, pelvic infection, septic abortion, uterine perforation. Perforation and migration to adjacent organs though uncommon; remains to be a serious complication.⁴ On some very rare occasions misplaced IUCDs have been retrieved from unusual locations like urinary bladder, rectum or omentum.⁵⁻⁷

Perforation and migration of the IUCD can be suspected when the threads of IUCD are not felt by the woman or seen by the doctor. Non localization of IUCD's threads does not mean it has perforated and migrated. It may signify either unrecognized expulsion, retraction of the threads in the cervical canal, falling off of the threads; rotation of the device within the uterus, threads cut too short, uterine enlargement or very rarely perforation and migration. IUCD like many other contraceptives have wrong beliefs and many myths among the public.⁸

When user is not able to feel the threads, she gets apprehensive and worries about perforation. Aim of this study was to find out the reasons for inability to palpate threads and suggest measures to avoid such situations.

Methods and results

The retrospective study was conducted over a period of eight years from 2005 to 2013 in different service hospitals. Female patients who came to OPD with the complaint of not being able to feel the threads on their own were included in the study. The age, parity, type of device or insertion whether interval or otherwise were noted. History of amenorrhea and any other symptoms too were recorded. Gynecological examination along with per speculum examination was performed. If the threads were still not palpable or visible then cervical canal was probed with an artery forceps, if the threads were felt in the cervical canal, they were gently wriggled out of the canal and straightened out. If the threads were not felt in cervical canal then uterine sounding was done. If the IUCD was not palpable in the uterine cavity the case was sent for

ultrasonography (USG). If the woman was not willing to continue IUCD; it was removed. The device was removed either in the OPD or by dilatation and curettage.

Of the 110 cases, one was nulliparous, 56 were primiparous and 43 were multiparous. 106 cases had got Cu380A inserted, 2 had Multiload inserted and two cases did not have any information as they had misplaced their paper. Duration of use of device varied from 4 to 21 months. The IUCD was inserted after induced abortion in 39 cases and it was an interval procedure in 61 cases; none of them had got it done as a post partum procedure or EC. All insertions except two were done in service hospitals by a specialist; two cases had got the device inserted while at their home town, details of which were not known.

Out of 110 cases included in the study, IUCD threads could not be felt by the user (108) and the threads were not visible in two cases when the patients had reported for removal of IUCD on request. IUCD threads (Table 1) were visible on speculum examination in 78 cases; these patients were reassured and explained about the correct location and safety of the device; advised regarding method of self examination. When the cervical canal was probed in remaining 32 cases where threads were not visible, the threads were found curled up in the cervical canal in 18 cases which were eased out of the canal and left long in the vagina. In three cases the threads had been cut too short hence they were not palpable by the patient herself.

In the remaining cases uterine cavity was probed with a uterine sound; IUCD was not felt in the uterine cavity in 4 cases; their localization was confirmed by ultrasound; which revealed the IUCD to be intrauterine. There was no need to resort to radiography, HSG, hysteroscopy or any other investigation etc.

Out of these 110, eleven cases did not want to continue using the device hence underwent removal. It was removed by an artery forceps in seven cases where the device could be felt with uterine sound, by dilatation and curettage in three cases. One case required hysteroscopic removal as dilatation and curettage had failed to retrieve the device. One device did not have threads indicating spontaneous falling off of the threads. In four cases where device could not be felt on uterine sounding and could not be removed by artery forceps; were presumed to be due to subendometrial placement of the device though it was not confirmed by hysteroscopy. In none of the cases the cause of missing threads was perforation and migration. There was no case of spontaneous expulsion.

Table 1 – Reasons for inability to palpate the threads.

S No	Total no of cases	110	Percentage
1	Threads visible on speculum exam	78	70.9
2	Threads felt curled up in cervical canal	18	16.3
3	Threads cut too short	03	2.72
4	IUCD felt on sounding	07	6.0
5	IUCD not felt on sounding	04	3.63
6	Threads fallen off spontaneously	01 ^a	0.90
7	Perforation and migration	00	00
8	Spontaneous expulsion of IUCD	00	00

^a Detected after removal of IUCD.

Discussion and conclusion

IUCD threads were not palpable or seen in 110 cases; in most of the cases (70%) the reason for not being able to feel the threads was failure on the part of the user though the device and threads were in the right place. There is need to explain to the patient the correct way of palpating the threads. She should be made to feel the cut off parts of threads with her own hands, subsequent to cutting the extra length after insertion. She will get the accurate feel of the threads and would know what exactly to look for. Second most common reason (25%) was the threads being curled up in the cervical canal, uterine cavity or cut too short. Threads should be cut in such a way that minimum 2.5–3 cm of threads are hanging beyond the external os. Only in four cases the IUCD presumably was buried under the endometrium as it could not be felt on sounding but could be located by USG. Hysteroscopy was done in one case where the device could not be removed by dilatation and curettage. The incidence of uterine perforation is very low, Grimaldi et al⁶ had stated in their article – “perforation occurs in 0.87 per 1000 cases but statistics generally fluctuate between 0.05 and 13 per 1000 insertions.” No case of perforation was reported in our study. This could probably be explained by small series of cases or insertion being performed by specialist in a service hospital. Uterine perforation usually occurs at the time of insertion and is due to faulty procedure. Chances of perforation are high at the time of lactation when uterus is small and atrophic.

This small study indicated that missing threads does not indicate perforation and migration. Frequent and regular examination may not be of much help; rather it may increase the fear and anxiety among the users as stated by Neuteboom et al.⁹ On the contrary some have mentioned that a regular self examination for “missing threads” should be made mandatory.¹⁰ Regular self examination of the threads should continue to be a regular aspect of post insertion follow up. All clients should be educated about the definite benefits of the device; side effects and complications can occur but their probability is very remote. These days facilities for USG are available in specialist OPD in most of the service hospitals. The correct intrauterine placement of the device can be confirmed after insertion by performing a transvaginal sonography and client reassured about its correct placement. In Armed Forces hospitals the device is always inserted by a specialist or family welfare doctor who is trained in IUCD insertion and the same practice should be continued.

In 2006, Government of India launched “Repositioning IUCD in National Family Welfare Programme” with an

objective to improve contraceptive services including advocacy of IUCD at various levels; capacity building of staff starting from ANMs to provide quality IUCD services and intensive IEC activities to dispel myths about IUCD. One of the myths people have is perforation and migration; the aim of the study was to dispel this myth.

“Common side effects of any contraceptive are not serious and serious complications are not common”

Conflicts of interest

The authors have none to declare.

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