

## ANALYSIS OF MISSED I.U.C.D. THREAD

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Displacement of I.U.C.D. is a common clinical entity. Transmigration of I.U.C.D. is reported to be, is 0.05-0.87% (Agarwal, and Singhae 1977). Following I.U.C.D. insertion routine follow up is done by palpating or inspecting the thread. If the thread is neither palpable nor visible, then one suspects either the I.U.C.D. has been expelled out or it is displaced intra/extra uterine intra-coelomically. Displaced I.U.C.D. no more serves its purpose and hence it should be located and removed though it is made of inert substance. Plain X-ray of abdomen excludes the possibility of its spontaneous expulsion, while contrast media (intrauterine) is needed to locate it exactly. Since 1976 to 1981—2,688 I.U.C.D. have been inserted and 142 (19.0%) cases of missing I.U.C.D. thread have been recorded at Umaid Hospital, Jodhpur.

### Observations

Out of 142 cases, only 14 (9.9%) were found co-incidentally either at the time of abortion (3), M.T.P. (8) and after sterilization (3) in whom X-ray abdomen was not done, rest were found to have missing thread on examination. Eighty-two cases

came for follow up, while 46 reported for gynaecological problem with the history of I.U.C.D. insertion. It is our policy to take plain X-ray abdomen in such cases. Thirty-five (25.6%) cases were negative for I.U.C.D. on X-ray and 26 (24.3%) cases who were positive for I.U.C.D. did not report for its removal. Among the reporters only 17 (20%) cases were having Cu. T. inserted and loop was found in 80% cases. Longest duration of insertion I.U.C.D. was 19 years while 3 months duration was the minimal. 5.5% cases were bearing I.U.C.D. for 3-5 years while 12.5, 13.5 and 13.5% cases were bearing I.U.C.D. for 6 months, 2 years and 6-10 years respectively and rest 4 were having it for more than 6-10 years.

Most of the I.U.C.D.'s (67) were found in utero and could be removed easily on curettage or with curved artery clamp and hook. Fourteen I.U.C.D.s were found lying outside the uterine cavity. Only 2 I.U.C.D. out of 14 (extra uterine) were found to be Lippes loop indicating transmigration is much more common with Cu.T. When no I.U.C.D. could be detected in the uterine cavity on curettage, laparotomy was decided in 12 cases and rest 2 I.U.C.D.'s were removed by anterior/posterior colpotomy as I.U.C.D. were superficially palpable under the vaginal skin in either case. Endometrium obtained on curettage was sent for histopathological examination which revealed secretory

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TABLE I  
 Extrauterine Intrapelvic I.U.C.D.

Type of IUCD	Duration of insertion	Plane X-ray	D & C for IUCD location	Site of removal	Method of removal	Remarks
Cu.T.	2 months	+ve	-ve	Perforating Rt. cornu	Laparotomy	Omental adhesions present at Rt. cornu.
Cu.T.	6 months	+ve	-ve	Uterovascular space	Ant. colpotomy	Specifically palpable in the anterior vaginal wall. Cx. juxta portion vag.
Cu.T.	2 years	+ve	-ve	Omentum	Laparotomy	Omental adhesions present.
Cu.T.	3 years	Not done	Not done	Perforating left cornu	P. sterilization	Fimbrial end of tube adherent.
Cu.T.	3 years	+ve	-ve	Penetrating descending colon	Laparotomy	Omental adhesions.
Loop	1½ years	+ve	-ve	Perforating post wall of uterus	Laparotomy	—
Cu.T.	8 months	+ve	-ve	Uterovascular space	Laparotomy	Omental adhesions.
Cu.T.	2 years	+ve	-ve	Penetrating rectal wall	Laparotomy	Pt. C/o thread palpable on defaecation. P.R. thread palpable above anal sphincter.
Cu.T.	3 years	+ve	Felt cornu could not be removed	Perforating left cornu	Laparotomy	Omental adhesions.
Cu.T.	2 years	Not done	Not done	Perforating left cornu	P. sterilization	—
Cu.T.	2 years	+ve	-ve	Pouch of Douglas	Colpotomy	—
Cu.T.	3 years	+ve	-ve	Rectal wall	Laparotomy	Omental adhesions.
Cu.T.	6 months	Not done	M.T.P. thread broken IUCD not removed	Perforating uterine wall	Laparotomy	—
Loop	2 years	Not done	Not done	Uterine fundus	P. sterilization	Omental adhesions.

(30%), proliferative (70%) phase along with mild to moderate degree of non-specific inflammatory cell infiltration in 27% cases only. One case having intra-uterine I.U.C.D. for 13 years was found to have cancer cervix stage I, while another one bearing I.U.C.D. for last 4 years was having multiple fibroids. Endometrium of woman bearing I.U.C.D. for 19 years was found to have atrophic senile endometritis as curettage was done as a routine as she came with the complaint of purulent vaginal discharge and occasional vaginal spotting. I.U.C.D. was removed on curettage and retrospective history taking confirmed the fact of having I.U.C.D. for 19 years. 14 I.U.C.D.s located extrauterine but intra-pelvic were removed successfully as detailed in the Table I.

#### Discussion

Millen *et al* (1978) have reported that majority (69) of the missing I.U.C.D. were found in utero and could be easily removed with hook or artery clamp. In present series also 57 were removed on curettage and only 12 needed laparotomy and colpotomy (2). Patient may be unaware of intrauterine displaced I.U.C.D. and may become pregnant. Such retained I.U.C.D. may be expelled at the time of abortion, delivery or may be removed on M.T.P. Singhal *et al* (1981) have reported a case of I.U.C.D. removed during laparoscopy following M.T.P. In present series, 8 I.U.C.D.'s were removed on M.T.P., 3 at the time of evacuation done for spontaneous incomplete abortion. Three multigravida, had spontaneous normal delivery and while undergoing post-partum sterilization were found to have perforating I.U.C.D. Tubal and omental adhesions were present at the uterine cornual site of perforation in all cases.

Millen *et al* (1978) also have removed 4 I.U.C.D.'s in conjunction with abortion.

Extrauterine intrapelvic migration is much more common with Cu.T., at the time of insertion if plunger pushing technique is used instead of withdrawal. On laparotomy one may find I.U.C.D. in adhesions formed by omentum, intestine, colon, bladder and uterus etc. or it may be found lying free in the pouch of Douglas. In present series, I.U.C.D.s penetrating the descending colon (1) rectum (2) were removed on laparotomy as adhesions were helpful in locating the missing I.U.C.D. in 2 cases, while 3rd patient came with the complaint of feeling thread through anus at the time of defaecation. The objective finding was confirmed on P.R. examination.

Depending upon the site of perforation of uterine wall and adherent structures I.U.C.D. may be found in bladder (Subhadra, 1969), colon, rectum, omentum or in a mass formed by the adhesions.

Hence we recommend that once I.U.C.D. thread is not seen, I.U.C.D. can be located by X-ray and in majority, it is intrauterine which can be removed easily on curettage but in case of extrauterine intrapelvic migration it should be removed either by colpotomy, laparotomy or laparoscopy.

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