

LOOP IN THE FALLOPIAN TUBE

(A case report)

by

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Lippes loop has been found to be a widely accepted intra-uterine contraceptive device throughout the world and since its introduction in India from July, 1965, it has been found to be a safe and effective family planning measure.

The various types of intra-uterine devices which are at present used throughout the world are not without their complications. Apart from the menstrual abnormalities and pain, cases have been recorded of uterine perforation and extra-uterine displacement of Lippes loop; even cases of ectopic gestation consequent upon Lippes loop are on record. But the extrusion of a Lippes loop through the fallopian tube and hanging freely from its fimbriated end into the peritoneal cavity, like a bat from a tree, has probably never been encountered. The next sequela of such an event is extrusion of the loop into the

peritoneal cavity and getting adherent to the omentum, intestine or lying freely in the abdomen. That the usual route by which the loop finds its way into the peritoneal cavity is by perforation of the uterus is the consensus of opinion. But in many cases no sign or symptoms of such perforation can be elicited. In our opinion the mechanism of the loop being expelled into the peritoneal cavity is probably through the fallopian tube in most instances and the purpose of this paper is to demonstrate an illustrative case where this could be ascertained at laparotomy.

Case Report

Mrs. P., aged 40 years, was admitted at the Darbhanga Medical College Hospital for Women on 30th October, 1969, with a history of I.U.C.D. inserted 3 years back at Baharampore in the Murshidabad district of West Bengal. For 2½ years she complained of pain in the right iliac fossa which was spasmodic and coming off and on.

Obstetric History

Married at the age of 18 years, P5 + 0, all full term normal deliveries with uneventful puerperia. At present 4 male issues are alive. Last childbirth was 5 years back.

Menstrual History

Menarche at the age of 15 years. Cycles

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—regular, 30 days, duration 4-5 days,— moderate flow without dysmenorrhoea. L.M.P. 8th November 1969.

History of Present Illness

She was symptomless for the first six months, but after that she felt pain in the back and pelvic region. The pain was more in the right lower abdomen and was spasmodic in nature. For the above complaints she visited the family planning centre to get the loop removed. The doctor in the family planning centre advised her that the loop was in its proper place and it could be kept undisturbed for 5 years. She next attended the family planning centre of Madhubani in the district of Darbhanga in Bihar. It was reported that the family planning officer could not find the thread hanging through the cervix and referred her to Darbhanga Medical College Hospital, but she did not attend this hospital at that time. She attended the outpatient department only on 30-10-69 and was examined and advised an x-ray of the pelvis and lower abdomen. General condition of the patient was good. Laboratory investigations of blood, urine and stool did not reveal any abnormality. Hb. was 10.7 gms%. Internal examination showed a normal sized, retroverted uterus. The fornices were clear and no mass was palpable on vaginal examination. The abdominal examination revealed no abnormality and no lump in the right iliac fossa, nor could any tenderness be elicited. X-ray on 30-10-69 showed the loop lying transversely, displaced more to the right. (Fig. 1).

Suspecting displacement of loop from the abnormal radiological appearance — a dilatation was done and removal of the loop by curettage was attempted, but the loop could not be brought out. A gritty feeling in the right cornual region was, however, felt with the curette. Extra uterine displacement of the loop into the myometrium was suspected and an abdominal operation was decided upon. Radiological examination repeated on 17-11-69 prior to the operation indicated the position of the loop away from the midline on the right side lying vertically. (Fig. 2).

On exploratory laparotomy under general anaesthesia the cranial end of Lippes loop,

size 30 mm., breadth 2.5 mm., was found hanging freely into the peritoneal cavity. The caudal end was inside the fimbriated end of the tube with only flimsy adhesions to the lumen of the tube. The Lippes loop in situ with part of the right tube was removed by partial salpingectomy with ligation of the proximal end (Fig. 3). Similar treatment was done on the left side as sterilisation was requested. No evidence of any injury or perforation of the uterus, either anteriorly, posteriorly or laterally, was seen. The abdomen was closed in layers. The postoperative period was uneventful and the patient was discharged on the 7th post-operative day in good condition.

Comments

Various complications after the insertion of Lippes loop have been reported in the literature, like intra-uterine pregnancy, uterine perforation and displacement into the peritoneal cavity and ectopic gestation.

With the increased incidence of I.U.C.D. insertion, extra-uterine displacement of Lippes loop has become more common, but, to our knowledge only one other case of a loop travelling through the fallopian tube has been reported by Sankari and Patel (1969). In their case, the loop even perforated into the lumen of the appendix.

The passage of the loop through the tube and its extrusion into the peritoneal cavity is difficult to surmise. The loop in this case was of 30 mm. size and of the usual diameter of 2.5 cm., the one supplied by the Ministry of Health and Family Planning, Government of India.

The authors feel that in this case introduction of the loop high up into the uterine cavity near the pacer-maker of the uterus at the right

cornu-tubal junction initiated peristaltic activity, which in the non-gravid uterus drove the cranial end of the loop into the lumen of the right tube. The loop under pressure of the muscular action of the tube became straightened out and gradually progressed on towards the fimbrial end and finally extruded into the peritoneal cavity.

In a non-gravid uterus, this excitation of pacemaker of the uterus, more particularly in the secretory phase of the menstrual cycle may have been responsible for the initiation of this mechanism and repeated muscular action in different cycles may have driven the loop finally into the peritoneal cavity. The retroverted state of the uterus may be an additional contributory factor.

The authors further feel that the loop should not be introduced very high up and care should be taken at rotation after its introduction. The full 90° rotation may bring the cranial end in very close and intimate contact with the myometrium or the interstitial part of the tube. Both, perforation of the myometrium and extrusion through the tube leading to displacement of the loop can be avoided. A smaller loop with 27.5 mm in the authors' opinion is more suitable.

The I.U.C.D. is a very important family planning measure in our country and though there are complications at times, it will still be an important method. A careful introduction and other considerations will obviate to a great extent these complications.

Summary

A case with extra-uterine displacement of loop has been reported. The mechanism of extrusion through the tube has been explained and a suggestion for a change in the quality and size of the loops to be employed is made. The chance finding of the loop in the fimbrial end has made the case more interesting and has substantiated our theory of the mode of extrusion of the loop into the peritoneal cavity.

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See Figs. on Art Paper X