

ECTOPIC LOOP IN THE FOLLOPIAN TUBE

(A Case Report)

by

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Throughout the world six to eight million women are using I. U. C. D. for contraception in large scale family planning programmes. The various negative aspects affecting its popularity are trivial complaints like bleeding per vaginam, pain, pelvic discomfort and major catastrophes like pregnancy and perforation. Although the use of I. U. C. D., has increased from 320,00 (1965) to 2,000,000 (1967) it has not gained popularity due to its inherent risk of perforation. It is interesting to note that pilot Project studies (Jhaveri 1968; Virkar 1968; Mukherjee 1968; Phatak 1966) reported no perforation. Later many Indian workers have encountered from 1966 to 1970 about 57 cases (Table-1). As the least common site is the tube, such an ectopic site if encountered is worth reporting.

CASE REPORT

Mrs. C. aged 26 years, was admitted in Vani Vilas Hospital on 20-4-1971, for pain in left iliac fossa of 1 year's duration, which had become severe since two months.

Menstrual History: She attained menarche at the age of 14. Her menstrual cycles were regular 28-30 and her last menstrual period was on 1-4-1971.

Obstetric History: Para 3 plus 1 abortion. All three deliveries were full term and all children were alive. Last delivery was 4 years ago.

History of present illness: one year after her last delivery Lippes loop was inserted at Taluk Hospital one week after her menstrual period. Patient said that she was comfortable and had no complaints during and after the insertion. But, since 1 year, i.e., 2 years after the insertion, the patient was experiencing excruciating pain which since two months, was enhanced in the mid-menstrual cycle. She had not attended the family planning clinic for a check-up but was later recommended by a city doctor to us, as she could not feel the nylon threads of the I. U. C. D., General examination was satisfactory. Local examination revealed no tenderness, mass or rigidity. Internal examination showed the uterus as retroverted with clear adnexae. The nylon threads were not palpated nor were seen on speculum examination. Sounding of the uterus was not conclusive and hence the next day curettage was done. The loop could not be located nor removed from the uterine cavity. An X-Ray taken with uterine sound in situ showed the loop outside the cavity deviated away from the mid-line to the left with undue widening of the loop spirals. On 6-5-1971, laparotomy was done and the loop was visualised emerging from the left tube with a few flimsy adhesions. The cephalic end of the loop was free but the caudal tip with threads was identified still inside the fimbrial end of the left tube. The other tube and both the ovaries were normal. Uterine surface seemed intact. Left tube with loop in situ was removed and right tubectomy was done (Fig. 1). The patient made an uneventful recovery and was discharged on 18-5-1971.

Comments

The W. H. O. group described an extra-uterine, intrapelvic position of the I. U. D.,

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TABLE I
Sites of Perforation of Loop

Year	Author	Place	No. of Cases	Sites of Perforation of Loop								
				Body of uterus	Cornu of uterus	Utero-vesical pouch	Pouch of Douglas	Broad lig	Perito-Neum	Omentum	Tube.	Appendix
1	2	3	4	5	6	7	8	9	10	11	12	13
1966	Indru	—	1	—	—	—	—	—	—	1	—	—
	Nanda	Assam	1	—	—	—	1	—	—	—	—	—
	Mazumdar	Calcutta	1	—	—	—	—	—	1	—	—	—
1967	Chakravarthi	Bengal	4	—	—	—	—	—	4	—	—	—
	Chaturvedi	Bhopal	2	1	—	—	—	—	1	—	—	—
	Gadgil	Poona	1	1	—	—	—	—	—	—	—	—
	Phillips	Amritsar	7	—	—	1	—	1	—	4	1	—
	Walmiki	Nagpur Conference	3	—	—	—	—	—	3	—	—	—
1968	Basu Mallik	Benares	1	—	—	—	—	1	—	—	—	—
	Chakravarthy	Bengal	4	1	1	—	—	—	2	—	—	—
	Gupta	Kanpur	1	1	—	—	—	—	—	—	—	—
	Hingorani	Delhi	2	1	—	—	—	—	—	1	—	—
	Pujari	Baroda	2	—	1	—	—	1	—	—	—	—
	Rohatgi	Kanpur	1	—	—	—	—	—	1	—	—	—
	Sabharwal	Delhi	2	1	—	—	—	—	—	1	—	—
1969	Jacob	Jaipur	6	1	—	—	1	2	—	1	—	1
	Kunders	Vellore	2	—	—	—	1	—	—	1	—	—
	Panda	Orissa	3	1	—	—	1	1	—	—	—	—
	Pujari	Baroda	2	—	1	—	—	1	—	—	—	—
	Rao	Kurnool	2	—	—	—	1	—	—	1	—	—
	Sankari	Bombay	2	—	1	—	—	—	—	—	—	1
1970	Menon	Madras	4	—	—	2	1	—	—	1	—	—
	Peters	Jaipur	1	1	—	—	—	—	—	—	—	—
	Sinha	Dharbanga	1	—	—	—	—	—	—	—	1	—
	Tamaskar	Nagpur	1	—	1	—	—	—	—	—	—	—
			57	9	5	3	6	7	12	11	2	2

as uterine perforation (Menon). Ectopic loop or extrauterine sites of loop are of two types:

1. *Complete type*: The device is placed directly into the peritoneal cavity during insertion, either by the introducer or by the applicator. This depends upon the manner of introduction, type of device, position and consistency of the uterus. Therefore, it is of sudden occurrence.

2. *Incomplete type*: The loop is partially attached to the uterus, but is not in the cavity. This is a gradual process and hence the aetiology is different. It may be due to erosion of the uterine myometrium by the loop itself or emergence of the loop through a pre-existing perforated site. Another recent theory postulated by Shirodkar is that of anteperistalsis where the cranial end of the loop finds its way into the cornual opening of the tube and gradually by reverse peristalsis the loop straightens itself in the tube and later is expelled into the peritoneal cavity.

Hence there are two mechanisms, a sudden and a gradual one to explain how the loop can reach the peritoneal cavity. In the latter process of becoming extra uterine, the loop may lodge in the tube for some time. As can be seen in our case the loop was found to be emerging from the tube, so vividly described by Sinha as like a "bat hanging from a tree" and confirms that the phenomena does exist. Sinha postulated that this occurs if the device is placed high in the utero-tubal junction. The author agrees that if the loop is properly placed, in the uterine cavity this mishap can be avoided. Hingorani commented that perforation was common when loop insertion was done during lactational amenorrhoea, but Phatak observed no perforation if extra care and patience were practiced.

It has been observed that an ectopic loop always causes spasmodic plevic pain, but with no menstrual disturbance. In this case also the patient had pelvic pain with no menstrual disturbance. Further, all reports agree that diagnosis of an ectopic loop is made if the nylon threads are not palpated, nor visible, and curettage excludes intrauterine coiling or displacements of the loop. Further confirmatory evidence is by radiological examination of the pelvis with the uterine sound in situ or better still with the dye in the uterine cavity.

It is seen that diagnosis poses no problem, but the management is controversial. Conservative non-surgical treatment leaving the Lippes loop as it was advocated by previous workers, who considered that the inert polythene material of the open variety caused no irritation and hence there was no danger of peritonitis or intestinal obstruction. They all agreed that there could be chances of only few flimsy adhesions, and advocated constant follow-up of such patients. (Lepfeldt, Indru, Chaturvedi).

But the majority of authors are in favour of elective surgical treatment as there are chances of intestinal obstruction developing later on (Pujari, Chakravarthy, Peters, Mcfarlane). Further the psychological aspect is so overwhelming that the patients readily consent for permanent tubectomy combined with loop removal (Jacob). The abdominal route is preferable (Menon), although a vaginal approach can be done in selected cases. (Nanda, Nakamoto). Menon advocates that as the loop orbits about in the peritoneal cavity, not only is it preferable to do an abdominal approach but also to do so as soon as possible.

Conclusions

This rare but interesting case of loop

in the fimbrial end of the left tube is presented not only for its rarity but also to understand the following points:

1. The phenomenon of gradual extrusion of the loop through the fallopian tube is confirmed and explains those asymptomatic cases of extrauterine loop occurring after a long interval after loop insertion.

2. This entrance of loop into the tube can be prevented by proper placement of the loop in the uterine cavity i.e., not too high near the utero-tubal junction.

3. As Menon summarises, careful selection, proper insertion and good follow-up are three essentials for success of the loop programme.

Summary

A case of ectopic loop emerging from the left fallopian tube is reported. The method of extrauterine displacement, incidence, diagnosis, and management of perforated loop have been briefly discussed.

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See Fig. on Art Paper I