

ECTOPIC PREGNANCY AFTER LOOP INSERTION

(A Case Report)

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Of the complications reported after Lippes loop insertion, a very rare event is of ectopic pregnancy with device in the uterus. Whether this occurs as a sequela to the insertion or as a matter of course has not yet been fully established. But the fact remains that this condition endangers the life of a woman to such an extent that, if not diagnosed and treated in time, it can prove fatal. One such case recorded in our hospital, is reported below:-

Case Report

I. K., third gravida, reported to the Govt. Hospital for Women, Amritsar, on 15-9-1967, with complaint of attacks of pain in the lower abdomen for the last 10 to 15 days; amenorrhoea of one month and seven days. She had loop insertion about a year ago, inserted one year after her last delivery. Menstrual cycle was regular but for this time when she missed the period.

On general examination the patient was moderately built and well nourished. Pulse was 80 per minute and B.P. 120/80 mm. Hg. On vaginal examination, the uterus was anteverted, slightly bulky; fornices were clear. She was not tender on examination.

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Loop threads were not seen through the cervix. Plain x-ray of abdomen showed the loop in the pelvis. Laboratory investigations revealed, Hb. 9 gms%, total leucocyte count 11,000, differential leucocyte count, poly 70%, lympho 30%. Patient was afebrile. She was kept in the hospital for 6 days. During this period she was put on terramycin capsules, one 6 hourly. She was discharged and was advised to report again for a check up after 15 days. She was again admitted as an emergency on 3-10-67 with an attack of acute pain in the lower abdomen. She got the loop removed on 1-10-67 at some health centre.

On vaginal examination the uterus was found to be large, multiparous in size and soft in consistency.

There was no definite mass in any of the fornices. Patient was slightly tender on vaginal examination. She was afebrile. Laboratory investigations revealed, Hb. 7 gms%, total leucocyte count 10,250, differential count: poly 75%, lympho, 18%, eosinophil 4%, large monocytes 3%. The patient was given one blood transfusion on 8-10-67. She was having continuous dull pain in the lower abdomen; at times the pain was quite severe. On 14-10-67 patient, while going to the bath, fainted and fell down. After this the pulse went up to 120 per minute, B.P. 90/60 mm Hg. There were signs of intraperitoneal haemorrhage. On vaginal examination the uterus was found to be large and multiparous. There was fullness in both the fornices, more so in the left, although no definite mass was made out. She was tender on vaginal examination. She was given a blood transfusion and laparotomy was done under general

anaesthesia on 15-10-67. There was free blood in the peritoneal cavity. Left tube was the seat of ectopic gestation which had ruptured. Ovary was also badly adherent and could not be saved. Hence left salpingo-oophorectomy was done. Post-operative period was uneventful and she was discharged on the twelfth post-operative day.

Discussion

Although pregnancy is reported to occur even in the presence of a loop in the uterus in a very small percentage of cases, the incidence reported by various authors varies widely, Oppenheimer (1959) 2.5 per 100 women years, Jack Lippes, 2.9 per cent, Sartherth Waite, 6.3 per cent Tietzee, 4.5 per cent, Rutherford (1961) 8.1 per 100 women years. Some cases of ectopic pregnancy have also been reported by various authors after the insertion of the loop. In 99 cases of pregnancies with the loop in the uterus reported by Tietzee, 14 were ectopic. In the 7,000 cases of loop insertions observed by Jack Lippes, 23 cases conceived out of which 4 were ectopics. Wilson and associates (1965) reported three ectopics out of 18 conceptions in 623 cases. Chen and Tako (1966) reported 6 cases of ectopic pregnancy with the Lippes loop. Of these two were acute ectopics. They had more than two pints of blood in the peritoneal cavity. The other four patients presented as subacute ectopics and in these there was collection of blood either around the affected tube or in the pouch of Douglas. In five of the cases ectopic pregnancy occurred in the right fallopian tube and in only one case was it in the left one. Denny (1966) reported a case of ectopic pregnancy which was mistaken for salpingitis

and the symptoms of bleeding and pain were attributed to the device. It was, therefore, removed by the attending doctor, but the continuance of the symptoms, even after removal suggested an ectopic. Ti-vago (1966) reported a case of pregnancy in one horn of a bicornuate uterus after previous insertion of a Lippes loop into the other horn. From India, one case of ectopic pregnancy in the right tube has been reported by Ajinkya *et al* (1966). The mechanism of intrauterine device for preventing pregnancy is not known definitely but various theories are put forward. That it discourages the nidation of the ovum in the uterine cavity, either by preventing the utilisation of hormones locally, or creating a hormonal imbalance by altering the cells permanently. Others believe that it acts by changing the vascularity or enzyme patterns of the uterus so that the fertilised ovum cannot get hold on to the decidua. Another belief is that the foreign body in the uterus causes hurried peristalsis of the fallopian tube so that the ovum is propelled into the uterus before it has a chance to get fertilised. The loop probably does not interfere with the fertilisation of the ovum in the fallopian tube as is evident from the number of cases of ectopic pregnancy reported in the literature. Could it be that by acting as a foreign body in the uterus it stimulates uterine contractions and so interferes with the implantation of the fertilised ovum in the uterus? If this be so, then it is certain that in patients who are already prone to ectopic pregnancy, the presence of the intrauterine device does not reduce this tendency. In the majority

of cases of ectopic pregnancy there is a long period of infertility, either caused by partial tubal infection or by congenitally underdeveloped long fallopian tubes. In the present case the last child was only two years old. The tubal factor was therefore not responsible. Whether it was a chance ectopic or due to the presence of the loop in the uterus can not be clearly established at this stage.

As an intrauterine device may cause, at least initially, pelvic pain and metrorrhagia or menorrhagia, it is possible to mistake the pain and menstrual disturbances of ectopic pregnancy for the symptoms produced by the device. In fact in four cases reported by Ta-Ko (1966), and in our case also, the patients got the device removed at a centre in the belief that the symptoms were due to the device. It is not the intention to condemn the use of the intrauterine device but it should be kept in mind that ectopic pregnancy can occur even after its insertion and may test the diagnostic proficiency of a physician.

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