SILENT PERFORATION OF THE UTERUS WITH LIPPES LOOP

by

VERA HINGORANI,* F.R.C.O.G., F.A.C.S., F.I.C.S.

In the present era, intrauterine contraceptive device (I.U.C.D.) is one of the methods of family planning, and gynaecologists are, therefore, likely to see the complications associated with it. Perforation of the uterus with I.U.C.D. is an infrequent complication and the case reports have started appearing (Hall 1964, Khan & Wishik 1964, Lohfeldt 1965, Thambu 1965, Clarke 1966, Hall 1966, Macfarlan 1966, Nanda 1966, Mazumdar 1966, Awom 1966, Tejuja 1966, Ledger & Willson 1966, Esposito 1966, Banerjee and Mukerjee 1967, Chaturvedi *et al* 1967, Phillips *et al* 1967, Gadgil, *et al* 1967, Walmiki, *et al* 1967). The two cases reported below in view of some interesting features, add to the number already reported.

Case 1

Mrs. K. D., 21 years old, para 3 + 1, was admitted on 13th January 1967 for laparotomy for removal of a loop, which had been found to be lying outside the uterus on hysterosalpinography (Fig. I & II). Patient had had a Lippes loop inserted on 5th March, 1965 during lactational amenorrhoea, her last childbirth being on 12th December 1964. The insertion of the loop was said to be easy. A tenaculum had been used for insertion and Lippes loop, size 27½ mm., had been used. The patient had her first period after loop insertion on 22nd May 1965 and then on 22nd June 1965. On 21st July 1965, the loop threads could not be seen but the loop was thought to be present on sounding and was visualized on plain skiagram of the abdomen done on 24-9-65. She missed her periods for 2 months in July and August 1965, and had a spontaneous abortion at home on 23rd September 1965. On the following day, on speculum examination, the threads of loop could not be seen but on plain skiagrams of lower abdomen on 24th September 1965 the loop had been visualized in lower abdomen and was thought to be in place. Patient was now keen to have the loop removed as she had conceived in spite of the loop and also was experiencing dull pain in the lower abdomen which she attributed to the loop. Since the thread of loop could not be seen it was decided to do a hysterosalpingogram to locate exactly the position of the loop. This was done on 13th November 1966 and it conclusively showed that the loop was lying outside the uterus—Fig. II. The long period between the plain x-ray and hysterogram was due to the patient being lost during Pakistan invasion.

At laparotomy done on 17th January, 1967, search for the loop was made on the right side of the uterus corresponding to the area where the loop was radiologically visualized, but the loop could neither be felt nor seen there. Tubes appeared normal. There were two points of depression on the fundus of the uterus (Fig. III). Whether they were the sites of perforation could only be conjectured. It was decided to explore the upper abdomen and in this search, the omentum was brought out and the loop was found embedded on its under surface (Fig. III). A portion of the omentum with the loop was excised. Abdomen was closed

* *Associate Prof. of Obst. & Gynec., All-India Institute of Medical Sciences, New Delhi.*

Received for publication on 20-3-1968.

and the patient made an uneventful recovery.

Case 2:

Mrs. S. D., 36 years, para 4 + 1, had a Lippes loop inserted on 8th June 1966 at a family planning centre 40 days after her last delivery. Her periods were regular with moderate flow before, but had become slightly excessive and frequent with a cycle of 14-25 days since the insertion of the loop. On 8th June 1967, the patient sought removal of the loop as she was bleeding following two months' amenorrhoea. An attempt to remove the loop at the local family planning centre had failed though the thread was visible and on pulling on it, it broke and part of it came out, but the loop could not be removed, hence the patient was referred to this institute. On pelvic examination, the uterus was found to be soft and the size corresponded to that of 8 weeks gestation and a moderate amount of bleeding was present. As the bleeding was persisting and was fair in amount it was decided to do dilatation and curettage and remove the loop. On curettage on 20th June 1967, products of conception were removed and the remaining bit of the thread of the loop could be grasped and pulled out without the loop. The loop could be felt with the curette lying deep in the anterior wall but it could not be removed. Embedding of the loop deep in the myometrium was suspected. It was decided to submit the patient to a hysterosalpingography for location of the exact site of the loop. This was done (Fig. IV) and the loop was found displaced anteriorly outside the uterine cavity. Laparotomy for removal of the loop and ligature of the tubes was done on 29th August 1967. On opening the abdomen the loop was not visible. In view of the location of the loop as seen os hysterosalpingography, the anterior wall of the uterus was palpated and the loop could be palpated in its entire extent in the anterior wall of uterus, lying barely 2 mm. deep to the serosa. Through a tiny opening made over the tip of the loop, the loop was grasped with forceps and easily removed. She made an uneventful recovery.

Comments

It appears that silent perforation of the uterus with Lippes loop does occur. When, at the follow up visit, the threads are not visualized, sounding can give fallacious results. A plain skiagram could also be deceptive though the displaced position of the loop and observation of widening of loop may arouse suspicion and indicate its extra-uterine position. Hysterosalpingogram gives a conclusive answer. Perforation of the uterus with Lippes loop occurs less frequently than with Birnberg's bow, the incidence being 1:969 and 1:208 respectively (Hall 1964). In addition there are minimal symptoms when perforation with Lippes loop has occurred as in the above cases and cases reported by Hall 1964, Khan *et al* 1964, Lehfeldt 1965, Clarke 1966, and Banerjee & Mukerjee 1967. Perforation in these cases was suspected either because the threads were not seen or pregnancy had occurred, and in Clarke's case diagnosis was made only incidently during cholecystectomy. Whereas, when perforation with Birnberg's bow occurred, as in Thambu's case (1965), the patient was acutely ill with intestinal obstruction. In most of the cases where perforation with I.U.C.D. has occurred, the I.U.C.D. insertion has been done during lactational amenorrhoea. Excessive friability of the uterus during this period was observed by Macfarlen (1966) who recommended postponement of insertion till the menstruation was established after delivery or till six months after delivery. If this is practised the great advantage of

I.U.C.D. is likely to be lost. Perhaps, extra care and gentleness may be practised during insertion, particularly if it is done during this period. Alternatively, early puerperal insertion on the 4th or 5th postpartum day (Hingorani 1966, Phatak & Vishwanath 1966), in which cases no perforations or serious complications have been reported, may be practised.

Summary

Two cases of silent perforation of uterus with Lippes loop are presented—one of them is a rare case of intramural displacement of the loop

Problems in diagnosis of perforation are discussed.

Measures to reduce the incidence are suggested.

References

1. Awon Max.: J. Obst. & Gynec. Brit. Comm. **73**: 858, 1966.
2. Banerjee, S. K., Mukerjee, K.: Proceedings of Second Seminar on Intrauterine Contraceptive Devices. Family Planning Institute, New Delhi, 1967 (In Press)
3. Chaturvedi, B. & Gulati, B.: J. Obst. & Gynec. India **17**: 738, 1967.
4. Clarke, J. P.: Am. J. Obst. & Gynec., **94**: 285, 1966.
5. Esposito, J.: Obst. & Gynec., **28**: 799, 1966.
6. Gadgil, S. M., & Anjaneyulu: J. Obst. & Gynec. India. **17**: 441, 1967.
7. Hall, R. E.: Proceedings of Second International Conference on Intrauterine Contraception p. 66, 1964.
8. Hall, R. E.: Am. J. Obst. & Gynec. **94**: 65, 1966.
9. Hingorani, V.: Proceedings of Second Seminar on Intrauterine Contraceptive Devices. Family Planning Institute, New Delhi 1966 (In Press).
10. Khan, Z., Wishik, S. M.: Proceedings of Second International Conference on Intrauterine Contraception, 1964, p. 28.
11. Ledger, W. & Willson, R.: Obst. & Gynec., **28**: 806, 1966.
12. Lehfeldt, H.: Fert. & Steril. **16**: 50, 1965.
13. Macfarlen, S. M.: Am. J. Obst. & Gynec. **94**: 283, 1966.
14. Mazumdar, M.: J. Obst. & Gynec. India, **16**: 725, 1966.
15. Nanda, S. P.: Brit. M. J. **2**: 50, 1966.
16. Phatak, L. V. and Vishwanath, S.: Indian, J. Med. Sc. **20**: 414, 1966.
17. Phillips, C., & Kaur, Gurcharan: J. Obst. & Gynec. India, **17**: 738, 1967.
18. Thambu, J.: Brit. Med. J. **2**: 207, 1965.
19. Walmiki, D. R., Joshi, S. K. & Gurav, R. S., Bhatt, R. V.: J. Obst. & Gynec. India, **17**: 444, 1967.
20. Tejuja, S.: Brit. Med. J. **2**: 1390, 1966.

Figs. on Art Paper II