PERFORATION OF UTERUS BY LIPPES LOOP

(Case Report with Brief Review of Literature)

by

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and

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Interest in intrauterine devices for contraception has been renewed during the past years. Unfortunately, the intrauterine contraceptive device (IUCD) has been associated with a number of problems, the major complications reported include severe pelvic inflammation, pelvic abscess and perforation of the uterus. The incidence of perforation of the uterus with IUCD is reported to be 0.5 to 8.7 per 1000 insertions (Wilson and Ledger, 1968; Povery and Silverman, 1971; Rowland, 1971 and Roberts and Ledger, 1972). Many cases of perforation of the uterus by Lippes Loop have also been reported in India (Nanda, 1966; Indra, 1966; Majumdar, 1966; Gadgil and Anjaneyulu, 1967; Chaturvedi and Gulati, 1967; Walmiki *et al*, 1967; Phillips and Kaur, 1967; Pujari *et al*, 1968; Chakrabarty and Mondal, 1968; Mali *et al*, 1968; Mallik, 1968; Sabhrawal, 1968; Tamaskar, 1970 and Peters, 1970). One further case of perforation of uterus by Lippes loop is reported.

Case Report

Patient N.D., aged 30 years was admitted on 29th May 1975 in Gynaec department of S.N. Hospital, Agra for extraction of displaced loop. She got Lippes loop inserted 8 months back on the 7th day of menstrual cycle. She used to come for check up every 3rd month regularly but on 29th May on speculum examination the thread of loop were not visible, so she was admitted.

Her general condition was satisfactory, pulse 80/mt. good, B.P. 120/70 mm. Hg. Abdominal examination did not show muscle guarding or tenderness. On vaginal examination the uterus was normal in size, anteverted, loop could not be felt through either fornix. Radiological examination revealed loop in right iliac fossa. Under general anaesthesia uterus was explored vaginally but the loop could not be felt so it was decided to do a laparotomy. The loop was found to be lying in broad ligament in the right side below the fimbrial extremity of fallopian tube. It was extracted out after putting a small nick in the anterior leaf of broad ligament. There were no recent or old signs of perforation in the uterus. Tubal ligation was done. Abdomen was closed. She had an uneventful recovery and was discharged in satisfactory condition on 13th June 1975.

Discussion

From review of literature it is obvious that many of us have come across this complication. In most cases there are no associated symptoms, condition being diagnosed only when the woman becomes pregnant or comes for routine check up. Obviously following questions arise which are being discussed from time to time.

(1) What is the mechanism of perforation of uterus by loop?

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(2) What are the predisposing factors and how can they be avoided?

(3) Displaced loop once diagnosed should be left in situ or be removed?

Loop may perforate the uterus during the insertion or it may migrate through the intact uterine wall, one can also perforate the uterus while removing it. Perforation of the uterus while insertion appears to be unusual because the Lippes loop is so pliable that it can easily confirm to the changes in the size and shape of the uterine cavity so that it is unlikely that it could itself penetrate the intact uterine wall by muscle contraction alone. Shirodkar (quoted by Walmiki) has put forth the theory of antiperistalsis. He has suggested that the cranial end of the loop can find its way into the cornual opening of fallopian tube and gradually by reverse peristalsis the entire loop may be expelled into the peritoneal cavity.

Following factors may predispose to uterine perforation by IUCD: (1) Lack of ample physician experience, (2) uterine consistency, (3) tight internal os, (4) uterine displacement, (5) rigidity of the introducer, (6) design and rigidity of IUCD.

Procedures recommended for avoiding uterine perforation with IUCD are as follows:

(1) Bimanual pelvic examination, (2) Uterine sound to assess (a) depth, (b) position, (c) tightness of internal os, (3) selection of proper size of device, (4) proper timing in relation to menstrual period and delivery, (5) cervical dilatation, if necessary.

Next the question arises once displaced loop is diagnosed should it be removed or not if it slips into the peritoneal cavity? Some authors (Bimberg and Burnhill, 1964; Indru, 1966) have kept conservative attitude while others have suggested that device should be removed electively at convenient time either by colpotomy, laparoscopy or laparotomy. However, the author is of opinion that once the loop has escaped into the peritoneal cavity it is better to get it out because of the danger of intestinal obstruction and as time passes more are the adhesions and secondly, because there is a psychological upset in such patients if loop is left inside.

In the case reported patient was asymptomatic but as she was willing for sterilization, laparotomy with tubal ligation was done.

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