

## A SIMPLE METHOD OF DIAGNOSING MISSING LIPPE'S LOOP

by

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Lippe's loop has been used as a method of contraception on a mass scale in Haryana. The missing thread (tail) is not an uncommon occurrence. It is reported either by the patient herself or noted by the medical or paramedical staff on routine checkup. In such a situation there are three possibilities, either the loop has been expelled, displaced or has got translocated after perforating the uterine wall. The nylon thread may retract into the cervical canal or uterine cavity without the device being displaced-Rosen (1965) and Ratnam and Yin (1968). Translocation of Birnberg bow in 0.2% cases was reported by Tietze (1965), while higher incidence has been reported after insertion of Lippe's loop in postpartum period by Ratnam and Yin (1968) and Peter and Gayatri (1970).

Diagnosis of a displaced Lippe's loop may be established by sounding the

uterus. Exploration of the uterine cavity by Shirodker's hook is both diagnostic and therapeutic if the Lippe's loop has retracted, but it is still within the uterine cavity. Gross displacement of the loop can easily be diagnosed by a plain X-ray as the device is radio-opaque.

Hystero-graphy is a sophisticated and certain way of diagnosing even minor translocations of loop. However, Fuchs *et al* (1965) considered it to be a complicated procedure. Fuchs *et al* (1965) and Ratnam and Yin (1968) stated that para-uterine translocation is diagnosed by a hystero-gram. Tacchi (1968) described the technique as diagnostic for even partial translocation of I.U.C.D.

Echo technique using the Beclocator may also be employed for locating the I.U.C.D. within or outside the uterine cavity as described by Jorgensen (1964) as well as by Fuchs *et al* (1965). With this method, partial displacement may however escape detection.

Totterman (1970) described a procedure in which a small Margulies spiral is introduced into the uterine cavity and a lateral skiagram is taken to localise the previous device in relation to the newly introduced spiral. They also advocated taking an antero-posterior picture and even at various angles, if necessary.

Hysteroscopy and laparoscopy are also used in the diagnosis of missing loops

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(Leventhal *et al* 1971, Ledward *et al* 1972 and Godstein and Ackermann, 1972). These techniques are available only in big institutions.

The routine in our unit for such cases has been as follows:

A speculum examination is made to visualize the thread.

Then a vaginal digital examination is made to feel the dislocated I.U.C.D. which may be palpated in the lateral fornices or in the pouch of Douglas. This has been rewarding in a few cases.

Next the sounding of uterus and exploration of its cavity by Shirodker's hook is done. The displaced device with a retracted thread can easily be taken out if still in situ. This is done in the out-patients department and a fresh device is introduced at the same sitting, if desired by the patient.

If, however, the device still eludes search then another Lippes loop is introduced into the uterine cavity and the patient is sent to the radiology department for a Plain-X-ray of the pelvis and lower abdomen (A.P. view only). If there is only one shadow of an I.U.C.D., then the first device has been expelled without the patient's knowledge. If two shadows superimpose then the previous device is either in the cavity of the uterus or it is embedded in its anterior or posterior wall. If the two shadows are seen separately then the position of the earlier device can easily be found out in relation to the position of the fresh one and the treatment can be effectively planned.

Keeping in view the complicated nature of hystero-graphy and the non-availability of hysteroscopy, laparoscopy and echo we adopt the above technique and have been depending upon it for the last 7 years with good results. To begin

with we took two pictures—one plain and the other after introducing the second device, but subsequently we found the plain film to be unnecessary. Sometimes, we even decided the issue on screening due to shortage of films. The technique has proved to be safe, simple, effective, economic and less time consuming. It was after quite sometime of using this method that we came across the report of Totterman (1970) who advocated taking a lateral picture and from other angles, if necessary. In our opinion the A.P. view suffices in locating the translocated I.U.C.D. as it has never failed us.

#### Summary

A simple method of diagnosing missing Lippe's loop by taking an X-ray (AP view) of lower abdomen and pelvis after insertion of second Lippes loop.

Illustrative pictures are appended as Fig. 1 and Fig. 2.

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See Fig. on Art Paper I