The Lost Loop: A Case of a Forgotten Lippes Loop in a Menopausal Woman Leading to Pyometra and Spontaneous Uterine Perforation

Dr. Siddesh Mahadev Iyer[1], Dr. Kunal Chhatbar[2]

[1]MBBS, DGO, DNB OBGY, MRCOG (London), DNB Teacher BDBA Hospital, Kandivali 2. Consultant OBGY, Saukhyam Hospital, Borivali 3. Honorary Consultant, KHM Hospital, Kandivali, Maharashtra, India
Address of Correspondence

602, A wing, Park Side 2, Raheja Estate, Kulupwadi, Borivali East, Mumbai-400066, Maharashtra, India
Telephone: 9223524599 Email: siddeshiyer[at]gmail.com

[2]MBBS, DNB (General Surgery), KHM Hospital, Mumbai, Maharashtra, India
Address of correspondence
Q/504, Panchsheel Gardens, Mahavir Nagar, Kandivli west, Mumbai, India
Pin code-400067. Email:-chhatbarkunal[at]gmail.com

Abstract: ***Intrauterine contraceptive devices have probably been the best long-acting reversible contraceptives available since the 1900s. Devices like the Lippes Loop, the oldest form of intrauterine devices, in vogue in the 1960s, are still found in women; most likely being forgotten. We report a case of a Lippes Loop that was inserted more than 50 years ago, and now presented with acute abdomen, due to a silent perforation in a post-menopausal woman.***

Keywords: Lippes Loop, perforation, menopausal

1.Introduction

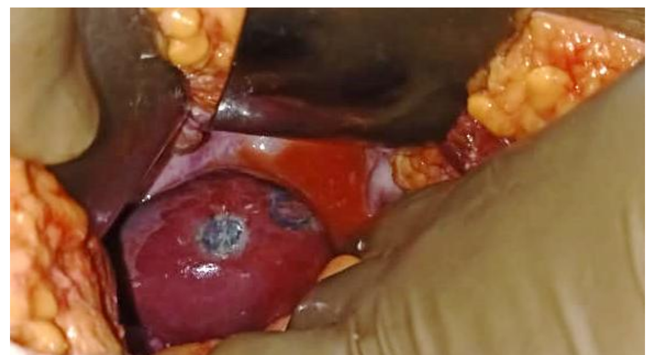
Intrauterine contraceptive devices have probably been the best long-acting reversible contraceptives available since the 1900s. [1]. This “Double-S” Intra uterine Contraceptive Device-Lippes Loop (LL), a flexible polyethylene plastic loop made by Dr. Jack Lippes, subsequently went on to become the standard for other IUD’s to be compared with [1, 2]. The original study evaluated more than 40, 000 women and found no complications.

They were intended for long term use until menopause. They were hence often retained for years, either deliberately or were even forgotten. Due to this, there have been complications following long term use of these IUCD’s.

We report this case of a menopausal woman, para1, who had absolutely no knowledge that she had a Lippes loop inserted almost 51 years back (probably after her first delivery). She even gave history of trying to have another child but could not conceive. She presented to the casualty with acute abdomen. She was evaluated with blood tests which showed leucocytosis and an ultrasound that showed free fluid in peritoneum and X-ray standing showed gas under diaphragm. A CT scan was done but she was taken up for an exploration on suspicion of intestinal perforation as her vitals deteriorated before the CT report was made available.

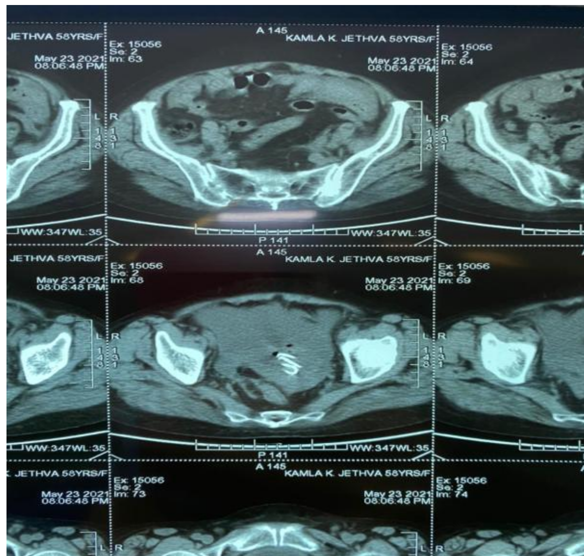
Intraoperatively there was pus all over the abdomen. This was sent for culture sensitivity testing. There was no bowel perforation. On inspecting the pelvis, there seemed to be pus coming from the fundus of the uterus. This was foul smelling and there were 2 holes on the uterine fundus. The Gynaecologist was called, and on palpating the uterus, it was soft, flabby, with significant pyometra and there seemed to be a hard structure that was popping out of this perforation. This was a Lippes Loop. A decision for a hysterectomy was taken with due consent. A total abdominal hysterectomy with bilateral salpingo-oophorectomy was done. Cervix on the specimen appeared taken up and totally atrophic.

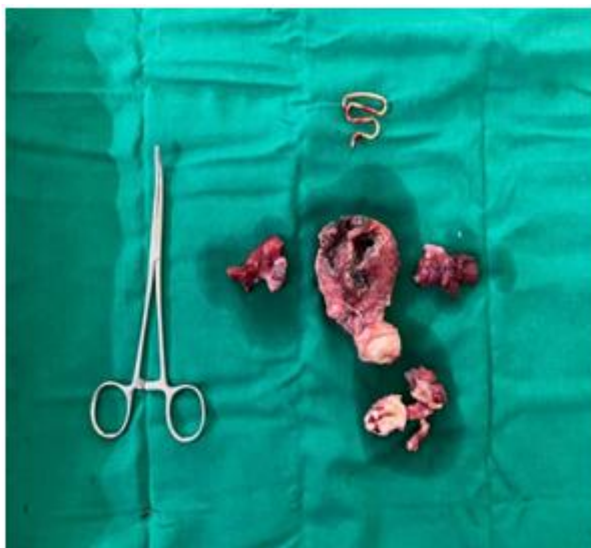
Post operative course was quite eventful. Patient suffered a stroke on post operative day 1 and had to be intubated and shifted to ICU where she was kept on a ventilator for a couple of days. She gradually recovered from it under care of the Intensivist and Neurophysician. She was discharged on post operative day 13. She did have a small segment of wound gaping due to a mild superficial surgical site infection which settled with oral antibiotics and secondary suturing. The final histopathology showed atrophic uterus and cervix with no evidence of malignancy. On the CT scan, which was available later, a Lippes Loop was seen in the uterine cavity.



Licensed Under Creative Commons Attribution CC BY

International Journal of Science and Research (IJSR)
ISSN: 2319-7064
SJIF (2020): 7.803





2.Review of Literature

Lippes Loop was available in four available sizes duly identified by different coloured tails namely Loop A (blue tail), Loop B (black tail), Loop C (yellow tail), Loop D (white tail). With the advent of copper devices they are currently no longer in use [3].

Review of literature the reported complications of an IUD-Lippes Loop retained in uterus for several years often beyond menopause are discussed below.

Infections, like Actinomycosis as a rare cause of PID associated with IUD cases have been reported in literature from time to time [4].

A number of difficulties are encountered in removal of long term IUD as they tend to accumulate small deposits of calcium. This causes corrosion in the plastic rendering it liable to fracture & breakage. Also, there is a chance that the loop tends to bury in the endometrium resulting in difficulty in removal which may become more difficult after menopause because of atrophy of uterus & cervical canal [5].

Like in our case spontaneous perforation is a rare but well known complication of IUD insertion where the IUD initially embeds in the uterine wall. This may later even cause complete perforation to thus migrate in the peritoneal cavity [1, 6].

Chanin et al., reported an incidental finding of a wandering radio opaque structure in the abdominal cavity. This was a migrated LL in a case of postmenopausal 65-year-old lady being investigated for Endometrial Adenosquamous carcinoma [7].

Bharathi et al., reported an extremely rare case of migration of LL consequent to fimbrial extrusion which was detected after four decades in a 75-year-old lady who underwent exploratory laparotomy following initial impression of sub-acute intestinal obstruction but actually had a caecal malignancy [8].

Karmsmakers et al., reported a case where a 74-year-old presented with dribbling of urine, dysurea and a palpable mass in bladder and X-Ray revealed a large vesical calculus with Lippes Loop-IUCD. On Cystoscopic evaluation small inflamed bladder with calculus & fistula connecting the bladder with uterus was observed. [9].

Phupong V et al., reported a 67-year-old postmenopausal woman, with a uterine perforation from actinomycotic infection with Lippes loop IUD. She presented with acute abdominal pain and underwent laparotomy for a suspected perforation, like our case and exudative fluid was discovered in the abdominal cavity with the tip of the Lippes loop IUCD at one of the two small holes of the uterine fundus. She also underwent total abdominal hysterectomy with bilateral salpingo-oophorectomy. [10].

Pukale R et al., published a case report of a 50-year-old woman suffering from abdominal pain, fever & chills associated with foul smelling vaginal discharge and right sided adnexal mass suggestive of Pelvic Inflammatory Disease. However, investigations/X-Ray revealed a Lippes Loop in uterine cavity inserted 30 years ago & forgotten by the lady. Cut section of uterus following Hysterectomy showed a deeply embedded loop [11].

Sujatha VV reported two cases with retained intrauterine contraceptive devices. The first presented with perimenopausal bleeding and dysmenorrhoea and the second presented with postmenopausal bleeding and both had a Lippes loop in the uterine cavity. The symptoms resolved after the removal of the device. [12].

Agarwal N et al., reported a case of secondary infertility like ours where a 56-year-old postmenopausal woman suffered from secondary infertility and dysfunctional uterine bleeding due to a Lippes loop. The patient presented with symptoms of lower abdominal pain and dysuria. Ultrasound/X-Ray revealed an intrauterine contraceptive device (IUCD) [13].

Tracey et al., reported an unusual case of a 49-year-old post-menopausal woman who presented with vaginal discharge and was found to have forgotten a Lippes Loop

Licensed Under Creative Commons Attribution CC BY

inserted 20 years back. On removal, abnormal tissue adherent to the loop turned out be moderately/poorly differentiated Grade II/III-Endometrial Adenocarcinoma. [14].

Majid et al reported a post-menopausal woman with a huge pyometra with a Lippes Loop in situ. At the time of pyometra drainage cervix was noted to be suspicious and biopsy confirmed Stage Ib poorly differentiated Squamous Cell Carcinoma of the cervix. [15].

3.Discussion

From time-to-time there is mention literature of the side effects & complications from using various types of Intra Uterine Devices. These complications include ectopic pregnancy, bowel obstruction following perforation, uterine perforation, infections & death [1] which probably justifies the arguments and recommendations in favour of removal of IUCD like LL, once they have outlived their utility & function.

When contraception is no longer an issue, it is wise to remove IUCD's since they may cloud further necessary evaluation, although there is no direct association between IUCD and Cancers [16].

A non-systematic review of 40 years of Lippes Loop conclude the presence of these devices may hinder investigations if the patient presents later especially endometrial biopsy or ultrasound. [17].

The Faculty of Sexual & Reproductive Health Care (FSRH) guidance on contraception for women aged over 40 years states that intrauterine methods of contraception should be removed rather than left in situ after menopause as cases of Pyometra & Actinomycosis have been reported in postmenopausal women with Intra Uterine Devices [4, 18, 19].

4.Conclusion

Leaving an IUCD behind indefinitely, whether deliberately or having forgotten it, can lead to disastrous complications. One should keep in mind the intended use, and remove the device when appropriate.

References

[1] Harrison RF. Adenocarcinoma of the uterine body following use of Intrauterine Contraceptive Device. Irish Journal of Medical Science.1971; 140 (9): 407-09. [PubMed] [Google Scholar]
[2] Thomsen RJ, Rayl DL. Dr. Lippes and his loop. Four decades in perspective. Jr Reprod Med.1999; 44 (10): 833-36. [PubMed] [Google Scholar]
[3] Faculty of Sexual & Reproductive Healthcar Clinical Effectiveness Unit. Enquiry Reference.11 Dec 2012: 3941. [Google Scholar]
[4] Purdie DW, Carty MJ, McLeod TIF. Tubo-ovarian Actinomycosis & the IUCD. Br Med Jr.1977; 2: 1392. [PMC free article] [PubMed] [Google Scholar]
[5] Bromham DR. IUCD removal problems: a study of associated factors. British Journal of Family Planning.1982; 8 (2): 43-50. [Google Scholar]
[6] Tsafrir A, Plotkin V. One intrauterine device lost, two found. Fertility sterility.2008; 90: 185. [PubMed] [Google Scholar]
[7] Chanin M, Kuan-Gen H, Jongrak T, Angelica A, Chua A, Aranya Y. Forgotten intrauterine device wandering in the abdomen of an endometrial cancer patient. Gynecology and Minimally Invasive Therapy.2014; 3 (1): 26-27. [Google Scholar]
[8] Bharathi RS, Chakladar A, Kumari P. Mystery of the missing loop. Medical Journal Armed Forces India.2011; 67 (2): 177-78. [PMC free article] [PubMed] [Google Scholar]
[9] Karsmakers R, Weis-Potters AE, Buijs G, Joustra EB. Chronic kidney disease after vesico-vaginal stone formation around a migrated intrauterine device. BMJ Case Rep.2010; 2010: bcr1220092547. Published online Jul 26, 2010. [PMC free article] [PubMed] [Google Scholar]
[10] Phupong V, Sueblinvong T, Pruksananonda K, Taneepanichskul, Triratanachat S. Uterine perforation with Lippes Loop intrauterine device-associated actinomycosis: a case report & review of literature. Contraception.2000; 61 (5): 347-50. [PubMed] [Google Scholar]
[11] Ravindra P, Okram S, Vijayalakshmi S. Forgotten Lippes loop. Jr of Dental and Medical Sciences.2013; 8 (5): 19-20. [Google Scholar]
[12] Sujatha VV. Forgotten intrauterine devices presenting with pre-and postmenopausal bleeding: a case series. Trop Doct.2012; 42 (1): 56-57. [PubMed] [Google Scholar]
[13] Agarwal N, Kriplani A. Secondary infertility and dysfunctional uterine bleeding from Lippes loop placed 32 years earlier. International Journal of Gynecology and Obstetrics.2000; 69 (2): 167-68. [PubMed] [Google Scholar]
[14] Kay TA, Keay SD, Miller P, Renninson JN. Stage Ia endometrial carcinoma diagnosed on removal of an IUD. J Fam Plann Reprod Health Care.2001; 27 (2): 99. [PubMed] [Google Scholar]
[15] Majd H, Watermeyer S, El Hamamy E, Ismail L. A postmenopausal women presenting with Atypical symptoms and cervical cancer: a case report. Cases Journal.2008; 1: 401. [PMC free article] [PubMed] [Google Scholar]
[16] Sanyal C, Pahari K, Sharma M. Primary carcinoma of fallopian tube after prolonged retention of Lippes loop. Indian Med Assoc.1998; 96 (1): 25-26. [PubMed] [Google Scholar]
[17] Thomsen RJ, Rayl DL. Dr Lippes and his loop. Four decades in perspective. Jr of Reproductive Medicine for the Obstetrician & Gynecologists.1999; 44 (10): 833-6. [PubMed] [Google Scholar]
[18] Lely RJ, Van Es HW. Case 85: Pelvic Actinomycosis with an intrauterine device. Radiology.2005; 236 (2): 492-94. [PubMed] [Google Scholar]
[19] Pillai M, Van DV, Shefras J. Serious morbidity with long term IUD retention. Journal of Family Planning & Reproductive Health Care.2012; 35 (2): 131-2/4. [PubMed] [Google Scholar]

Licensed Under Creative Commons Attribution CC BY