



## Translocated Intrauterine Contraceptive Device: Management Dilemma

Doris Onwuzurike\*

Department of Obstetrics and Gynaecology, South Warwickshire NHS Foundation Trust, UK

### Abstract

We report a case of uterine perforation at the time of insertion of a Levonogestrel Intrauterine System (LNG-IUS). A chest/abdominal X-Rays were requested some weeks later and the IUCD was identified in the right upper quadrant of the abdomen. The dilemma was then what was the appropriate management of this translocated LNG-IUS as the patient was asymptomatic and she had become amenorrhoeic which was one of the original reasons why she chose this method.

**Keywords:** Translocated intrauterine contraceptive device; Levonogestrel intrauterine system

### Introduction

Intra-Uterine Contraceptive Devices (IUCDs) are a common choice for long term reversible contraception among women in the developed, as well as the developing world [1-3]. The high acceptability of IUCD is due to its affordability, safety profile, convenience, ease of reversibility and minimal systemic side effects [3]. There are only a few adverse events associated with the use of IUCD however these factors can greatly affect its acceptability [3]. One of such factors is uterine perforation at the time of insertion, this has been reported to occur in less than 1 per 1,000 IUCD insertions [3,4]. A Levonogestrel Intrauterine System (LNG-IUS) is a type of IUCD, which releases progestogen directly into the uterine cavity and then into the systemic circulation. It has a very low failure rate from a contraceptive viewpoint with figures ranging from 0.1% over a 1 yr period to 0.5% over a 5 yr timescale [5,6], but its main use is for reducing heavy periods in patients with dysfunctional uterine bleeding and making them amenorrhoeic in over 40% of cases in some studies [7].

### OPEN ACCESS

#### \*Correspondence:

Doris Onwuzurike, Department of Obstetrics and Gynecology, South Warwickshire NHS Foundation Trust, Lakin Road, Warwick, CV34 5BW, UK, Tel: 01926495321; Fax: 01926600096; E-mail: David.D'Souza@swft.nhs.uk

Received Date: 12 Dec 2017

Accepted Date: 29 Jan 2018

Published Date: 10 Feb 2018

#### Citation:

Onwuzurike D. Translocated Intrauterine Contraceptive Device: Management Dilemma. *Ann Clin Case Rep.* 2018; 3: 1502.

ISSN: 2474-1655

Copyright © 2018 Doris Onwuzurike.

This is an open access article distributed under the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

### Case Report

A 38 year old who had 3 children vaginally, was referred to the gynaecology outpatient clinic two months after she had a Levonogestrel Intra-Uterine System (LNG-IUS) fitted at a family planning clinic. She previously had a copper Intrauterine Contraceptive Device (IUCD) fitted in the past with no problems, but decided to change to a LNG-IUS in view of her heavy periods. She did find the procedure "slightly uncomfortable" and initially had right upper quadrant pain. Two days after the procedure, she could not feel the IUCD tag and this prompted her to seek medical advice. By the time she had the gynaecology appointment, the abdominal pain had settled and she did not complain of any bleeding or vaginal discharge. Her past medical history revealed conservative treatment for cervical intraepithelial neoplasia, grade 1, and she had had a normal cervical smear two years previously. She was married, did not drink alcohol or smoke and had no significant family history of note.

On examination, her abdomen was soft and mildly tender in the right upper quadrant. The uterus was noted to be retroverted, non-bulky and mobile with no adnexal masses palpable. On speculum examination, cervix appeared normal but the LNG-IUS threads could not be seen.

An initial transvaginal and transabdominal ultrasound (USS) Scan confirmed that there was no evidence of the LNG-IUS within the uterus. Subsequently, an abdominal X-Ray was requested and showed the LNG-IUS to be in the right upper quadrant of the abdomen (Figure 1).

The risks and benefits of a laparoscopic diagnosis and attempt laparoscopic removal were discussed with the patient. Concerns were raised about the possibility of a laparotomy being required if the laparoscopy was unsuccessful in finding, and removing the displaced LNG-IUS. She was reluctant to go ahead with this procedure and was subsequently discharged from the clinic with the advice to contact the unit if she developed any acute symptoms or if she wished to re-discuss the



**Figure 1:** X-Ray was requested and showed the LNG-IUS to be in the right upper quadrant of the abdomen.

management options again.

## Discussion

Uterine perforation is a recognised, but uncommon complication of IUCD insertions [4]. It is usually relatively asymptomatic but may present as sharp pain at the time of insertion, disappearance of IUCD threads, post procedure bleeding, local signs and symptoms based on eventual location. In rare occurrences when this occurs, a few case reports have identified the IUCD in the urinary bladder, rectum, colon, peritoneum, ovary, appendix and wall of iliac veins[8-13]. Several risk factors such as retroverted uterus, insertion during the early post-partum period, unskilled or inexperienced provider have all been associated with an increased risk of uterine perforation[13].

The Faculty of Sexual and Reproductive Healthcare (FRSH) recommends USS and a plain abdominal X-Ray as first line investigation for misplaced IUCD [14]. In this case this was proven to be successful in the identification of the IUCD in the right upper quadrant of the abdomen. Other investigations such as CT of the abdomen have been described to be needed when initial investigations have been inconclusive of the exact location of the IUCD[10]. The management of intra-abdominal migration of IUCD is surgical; Laparoscopy or laparotomy or eventually both if the laparoscopy fails to retrieve the IUCD. Although, removal is recommended even in asymptomatic patients as there is a risk of more severe complications due to perforation of intra-abdominal organs and vessels, the management option is still currently decided on a case by case basis and eventual decision is left to the patient after discussions of known pros and cons of each procedure. If a laparotomy is required, serious consideration must be given to the morbidity and mortality of such a procedure and the autonomy of the patient must be taken into account. It should also be remembered, what other devices surgeons leave in the abdomen to clip/clamp structures (e.g. filshie clips at sterilizations or surgical staples etc) and the fact that sometimes these can become detached at a later stage, without any long term effects.

In this case, despite discussions on the possible complications of conservative management, the patient decided the risk of surgery outweighed the potential risk of further intra-abdominal migration

of the IUCD and decided to opt out of this treatment. Even at laparotomy, it can sometimes be like “hunting for a needle in a haystack” and sometimes intra-operative radiological imaging may be useful in helping to identify the exact location of the IUCD and may reduce morbidity associated with the procedure.

## Conclusion

The patient exercised her autonomy in the decision making with regards to the management of her case and this also highlights the importance of “informed consent” when deciding which route to go down. The primary purpose of the Levonogestrel - IUCD was not as a method of contraception, but for the treatment of menorrhagia, and hence the woman was satisfied with being amenorrhoeic. It has now been 5 years down the line and the woman has still remained well with no other symptoms of note.

## References

1. Adeyemi AS, Adekanle DA, Komolafe JO. Pattern of contraceptives choice among married women attending the family planning clinic of a tertiary health institution. *Nig J Med.* 2008;17:67-70.
2. Ogedengbe OK, Giwa Osagie OF, Ola R, Fasan MO. Contraceptive Choice in an Urban Clinic in Nigeria. *J Biosoc Sci.* 1989;19:89-95.
3. World Health Organization (WHO). Mechanism of action, safety and efficacy of intrauterine devices. Geneva: WHO Technical Report. 1987.
4. Harrison Woolrych M, Ashton J, Coulter D. Uterine perforation on intrauterine device insertion: is the incidence higher than previously reported. *Contraception.* 2003;67:53-56.
5. Luukkainen T, Allonen H, Haukkamaa M, Pentti Holma, Juhani Terho, Istvan Bataret, et al. Effective contraception with the levonogestrel-releasing intrauterine device : A 12 month report of a European multicentre study. *Contraception.* 1987;36:169-179.
6. Anderson K, Odland V, Rybo G. Levonogestrel-releasing and copper-releasing (Nova T) IUDs during five years of use: a randomised comparative trial. *Contraception.* 1994;49:56-72.
7. Hidalgo M, Bahamondes L, Perrotti M, Diaz J, Dantas Monteiro C, Petta C. Bleeding patterns and clinical performance of the levonogestrel-releasing intrauterine system (Mirena) up to 2 yrs. *Contraception.* 2002;65:129-133.
8. Singh I. Intra-vesical cu-T emigration: An atypical and infrequent cause of vesical calculus. *Int Urol Nephrol.* 2007;39:457-459.
9. Maru L, Jharvade H, Lall PR. An unusual case of copper-T in rectum. *J Obstet Gynecol India.* 2005;55:79-80.
10. Mederos R, Humaran L, Minervin D. Surgical removal of an intrauterine device perforating the sigmoid colon: A case report. *Int J Surg.* 2008;6:60-62.
11. Poonia S, More V, Panchbuddhe S, Satia MN. Misplaced IUD in Rectosigmoid Mesentery. 2014;1.
12. Key TC, Kreutner AK. Gastrointestinal complications of modern intrauterine contraceptive device. *Obstet Gynecol.* 1980;55:239-244.
13. Heartwell S, Schlesselman S. Risk of uterine perforation among users of intrauterine devices. *Obstet Gynecol.* 1983;61:31-36.
14. Penney G, Brechin S, Bankowska U, Belfield T, Gormley M, Olliver M, et al. FFRHC Guidance. The Copper Intrauterine Device as Long-term Contraception. *J Fam Plann Reprod Health Care.* 2004;30:29-42.