

Infertility caused by an unnoticed intrauterine contraception device: Case series

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Abstract

Infertility is one of the reproductive health issues that affects 10%–15% of couples. There are different factors causing infertility: male factors, female factors, and combinations of them. Knowing the causes of infertility is very important for treatment, and looking for them starts with a simple physical examination and progresses to invasive diagnostic procedures. Although it is rare, there are reports of unnoticed and forgotten intrauterine contraceptive devices causing infertility in different parts of the world. This is a case series of three women who had 3–5 years of infertility consultations and were discovered to have an unnoticed intrauterine contraceptive device. All of them had intrauterine contraceptive devices inserted years before they came to the clinic for an infertility work-up and were unaware of that. These intrauterine contraceptive devices were inserted at different health institutions without any counselling, consent, or information given to the women. The purpose of this case series is to remind health care providers that they should provide counselling, ensure that she understands the type, advantages, and disadvantages of contraception, and that her choices are based on voluntary, informed decision-making before providing any type of contraception to any woman.

Keywords

Infertility, intrauterine contraception device, case series, Harar, Ethiopia

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Introduction

Infertility is defined as the inability of the couple to conceive despite unprotected sexual contact of 1-year duration. It affects about 10%–15% of couples all over the world and their socioeconomic status in addition to the reproductive health. Also, it is one of the reasons for divorce, especially in low-income countries.^{1–3}

Causes of infertility can be classified as female, male, or unexplained factors. Female factor infertility is further subdivided into ovulatory, tubal, uterine, cervical, and vaginal factors. While male factor infertility is subdivided into pre-testicular, testicular, and post-testicular.^{4,5}

Among uterine factors are anatomical abnormalities of the uterus, either congenital or acquired, such as uterine didelphys, septate uterus, arcuate uterus, uterine myoma, Asherman syndrome, adenomyosis, and others can cause infertility.^{6,7}

Unnoticed intrauterine contraceptive device (IUCD) causing infertility is an extremely rare event, with only a few case reports of women who forgot that they had IUCD inside

their uterus. In this report, I will discuss three women who came to the clinic for an infertility work-up and were found to have unnoticed IUCD in their uterus.^{8–11}

Case I

A 22-year-old woman presented to the clinic with a 3-year history of infertility. She had been married for 3 years prior to arriving at our clinic and stated that she had gone to various clinics and hospitals for infertility work-up for about 2 years and had never conceived. Upon historical exploration, she explained that she had a regular menstrual cycle and unprotected sexual intercourse. On physical examination, all systems have unremarkable findings except for the digital and

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speculum examinations, which revealed the IUCD string. On digital examination, an IUCD string was felt, and it was confirmed by speculum examination and pelvic ultrasound. She denied using any type of contraception, but during an in-depth interview, she revealed that she had terminated a first-trimester pregnancy from her previous boyfriend by MVA (manual vacuum aspiration) at the health centre 5 years prior to her current arrival. However, she denied any family planning counselling provided by the providers during the termination process, and she has no idea that an IUCD was inserted for her. She does not recall any gynaecologic or vaginal examinations performed on her other than the MVA procedure and her current examination. She was informed that the in situ IUCD was the cause of her infertility and counselled about its removal, which was done for her. After 2 months, she became pregnant, came for an antenatal care (ANC) follow-up, and gave birth to a healthy, alive child.

Case 2

A 27-year-old woman came with the complaint of failure to conceive for 5 years prior to the clinic visit. She has been married for 5 years and claims she has never used any type of contraception. She stated that she has a regular menstrual cycle and sexual intercourse. Upon physical examination, no abnormality was detected. Upon ultrasound examination, there was IUCD inside the uterus. Then, a speculum examination was performed; the thread was coiled inside the cervix, and the tip of the thread was grasped and removed. Although initially she denied any use of contraception, abortion, or pregnancy, upon in-depth questioning, she revealed that she had undergone MVA for a safe first-trimester abortion from her previous boyfriend at a health centre 7 years prior to her current visit, and no one has informed her about IUCD insertion. After 3 months of the IUCD removal, she got pregnant, had an ANC follow-up, and gave birth.

Case 3

This is a 32-year-old para 4 mother who presented with a 4-year history of inability to conceive. She stated that the last delivery was 4 years prior to the current visit, and it was an early neonatal death. She stated that after the last delivery she had PPH (postpartum haemorrhage), for which manual exploration and manipulation of the uterus were performed. She claims that she has never used any type of contraception since her last delivery. However, upon speculum examination, the thread of IUCD was visible, and it was confirmed with ultrasound that there was IUCD inside the uterus. During the speculum examination, the thread was grasped and removed. Despite the IUCD presence in her uterus, she denied receiving any counselling about the provision of contraception during pregnancy, delivery, or postpartum. After the removal of the IUCD, she never came back.

Discussion

Infertility is described as the inability of a couple to conceive after 12 or more months of unprotected sexual activity as the result of either male or female reproductive issues. It can be classified as primary or secondary. Primary infertility is when a person has never been able to conceive, while secondary infertility is when at least one past pregnancy has happened. Worldwide, infertility affects millions of people of reproductive age (10%–15% of couples), which has an effect on their families and communities. Worldwide, it is estimated that 48 million couples and 186 million individuals struggle with infertility. Approximately 85% of infertile couples have an identifiable cause. The three most common causes of infertility are ovulatory dysfunction, male factor infertility, and tubal disease. The remaining 15% of infertile couples have unexplained infertility.^{1,2,12,13}

IUCDs are one of the long-acting reversible contraception (LARC) methods in which fertility returns immediately after removal. Although there are rumours and myths about IUCD causing infertility in nulliparous women, multiple studies have found that IUCD does not cause infertility. Counselling, on the other hand, is an important part of family planning and one of the sexual and reproductive health rights. The woman should receive proper counselling regarding the benefits and drawbacks of various contraceptive techniques prior to receiving any sort of contraception, and only after having a complete understanding should she make a voluntary, informed decision. Women who are thinking about using LARC methods should get thorough information, both verbally and in writing, to help them choose and employ a method. In order to rule out infection, perforation, or expulsion, patients should also receive a follow-up appointment following their first menstrual cycle or 3 to 6 weeks after the device was implanted. Three of the above patients received no contraception counselling and were not informed about their IUCD inside their uterus.^{8–11,14–18}

Although uncommon, a forgotten IUCD is a potential cause of unexplained infertility and a differential diagnosis for gynaecologic symptoms. A diagnostic examination should be performed in a methodical, speedy, and cost-effective manner during the infertility work-up to identify all relevant factors, with an initial emphasis on the least invasive procedures for discovering the most prevalent causes of infertility. Pelvic examination is one of the required physical examinations, and pelvic ultrasonography, either transabdominal or transvaginal, is one of the first lines of investigation for all infertile women. All three women didn't know that there was IUCD inside them, and during the initial work-up of the infertility, if a pelvic examination and ultrasound had been conducted, the IUCD might have been easily recognised, removed, and unnecessary costs prevented.^{7,8,19}

Conclusion

Infertility caused by an unnoticed IUCD is a rare event; however, in this report, three women had IUCD insertions at different health institutions without their knowledge, which violates their reproductive rights. So, before providing any type of contraception to any woman, the health provider should provide counselling, ensuring that she understands the type of contraception and that choices are made based on voluntary, informed decision-making.

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Our institution does not require ethical approval for reporting individual cases or case series.

Informed consent

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Patient consent

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