Levonorgestrel intrauterine releasing device and extra-uterine pregnancy implantation: a case study

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INTRODUCTION

Levonorgestrel intrauterine releasing devices (LNG-IUD) provide highly effective, long-term, safe, and reversible contraception. Pregnancy is rare for patients using LNG-IUDs as their failure rate is comparable to surgical sterilization (1). For those patients who do fall pregnant, there is a higher likelihood of ectopic pregnancy of 0.02/100 women years (2).

AIM

We report on a case of a tubal ectopic pregnancy in a patient using a LNG-IUD.

CASE

A 43-year-old patient presented to our hospital with abdominal pain and vaginal spot bleeding. The patient's gynaecological history included two previous uncomplicated pregnancies with vaginal deliveries and no ectopic pregnancies. The patient also had a LNG-IUD inserted three years prior for menorrhagia. With regards to her gynaecology history, no history of endometriosis, sexually transmitted infections and normal cervical screening tests to date. The patient did not have any other medical conditions, had not had surgery, did not take prescription or complementary medications, had a normal body mass index, did not smoke or drink unsafe levels of alcohol. The patient's serum BHCG was 1633 and ultrasound indicated a right adnexal mass with free fluid in the pelvis.

RESULTS

- *Our patient underwent a laparoscopic bilateral salpingectomy for a ruptured right sided tubal ectopic pregnancy. Patient did not consent for images to be used.*
- *Histopathology confirmed ectopic pregnancy and benign fallopian tubes.*
- *Vaginal swabs were negative for infection including sexually transmitted infections.*
- *The patient's post operative period was complicated by an infected seroma treated with a course of intravenous antibiotics.*

DISCUSSION

An ectopic pregnancy for a woman using a LNG-IUD is rare however, the impact it has is physically, mentally and financially great. Retrospective studies found that younger age, increased body mass index, device malposition and device age over two years are all risk factors for LNG-IUD failure (2). Our patient's only identifiable risk factor was a three-year-old device.
The patient, during her inpatient admission, described feeling "overwhelmed" and "shocked," as she felt her age was the main factor that limited her fertility. The patient was aware that her IUD could have contraceptive fail however, she had never previously self assessed her IUD strings.
Our case highlights the importance of ensuring patients have a thorough LNG-IUD consenting process with the risk of failure discussed. In addition, it also highlights that healthcare workers need to consider pregnancy complications in all women irrespective of LNG-IUD use as no contraception.

REFERENCES

1. Bayer Global. Mirena IUD. Bayer. Update 2024. [cited 2024 January 5]. Available from: Bayer – Global Home | Bayer Global.
2. Pearson S, Boerma C, McNamee K, Bateson D. Long-acting reversible contraceptives: new evidence to support clinical practice. 2022. [cited 2024 January 6]. Available from: RACGP - Long acting reversible contraceptives.