

Uterine Abscess Caused by the Use of Intrauterine Device in a 62-Year-Old Patient: A Case Report

Fatih Mehmet Findik*, Elif Agacayak, Mehmet Sait Icen, Mehmet Siddik Evsen, Ugur Firat and Talip Gul

Department of Obstetrics and Gynecology, Dicle University, Turkey

Abstract

Pelvic Inflammatory Disease (PID) refers to an infection of upper female genital tract, including uterus, fallopian tubes and ovaries, which might involve adjacent pelvic structures. It is generally caused by a sexually transmitted infection. It occurs due to migration of an infection up to the genital tract during a transcervical intervention or pregnancy. The prevalence of PID has decreased in USA in the last decade. Almost 106,000 patients presenting to hospitals in USA in a year are diagnosed with PID, and 60,000 of them require hospitalization. The primary risk factor for PID is sexual intercourse. The risk of developing PID is non-existent in virgin women. On the other hand, women having one sexual partner rarely develop PID in the long term. Having multiple sexual partners is the biggest risk factor for developing PID. Young age, history of chlamydia or PID, and having a sexual partner who has a sexually transmitted disease can be listed among the other risk factors. Methods of contraception affect the frequency of PID. Specifically, barrier methods provide protection from PID whereas the use of intrauterine device (IUD) increases the risk.

Keywords: Intrauterine device; Pelvic inflammatory disease; Actinomyces infection

Case Report

A 62-year-old woman (gravida 13, para 11, abortus 2, and living 11) with a menopausal history of 12 years and insertion of IUD dating back to 16 years presented to a private hospital with complaint of pain originating from her groin and extending to her legs for the past 2 months ago. Magnetic resonance imaging results of the patient were reported as follows: A manifestation of IUD in the endometrial cavity. A cystic manifestation of 66x54 millimetres (mm), assessed in favour of inflammatory abdominal fluid-abscess situated in the cavity that extends the cavity and diminishes the myometrium, and a manifestation secondary to inflammation in the bilateral adnexal areas. The patient was hospitalized upon the diagnosis of pelvic abscess following the observation of a C-reactive protein (CRP) level of 3+ and a sedimentation level of 56 millimetres/hour (mm/h), and the abscess was discharged through curettage. A foul-smelling discharge was observed during the procedure. The cavity was cleared, and the procedure was terminated. The IUD could not be removed in this particular procedure. The pathology examination of the culture collected from the patient resulted in the findings of active chronic endometritis and actinomyces colonies. The patient was treated with a 5-day intravenous regimen of 1gram (gr) 2x1 ceftriaxone disodium and 1 gr 1x1 ornidazole. At the end of the 5th day, patient was referred to our hospital upon reappearance of the abscess [1,2].

In our hospital, the gynaecological examination of the patient provided the observation of a natural picture in the vulva, vagina, and cervix with no manifestation of the IUD string. There was bilateral sensitivity in cervical movements. The transabdominal ultrasound showed a natural picture in bilateral adnexa and a uterus of 77x36 mm. Intrauterine observation resulted in a cystic manifestation of 55x33 mm that suggested the presence of an abscess, and an image suggesting the presence of IUD (Figure 1). Analyses performed on the patient resulted in the readings of 9.49 10³ cell for White Blood Cells (WBC) and of 8.8 milligrams/litre (mg/L) for nephelometric CRP. The body temperature, pulse, and blood pressure levels of the patient were all normal. The patient was put on an intravenous treatment regimen of 1 gr 2x1 ceftriaxone disodium and 500 milligram (mg) 2x1 ornidazole upon the diagnosis of pelvic abscess. The performance of hysterectomy was planned upon the additional consideration of the reappearance of the abscess in a short while after the previous intervention implemented

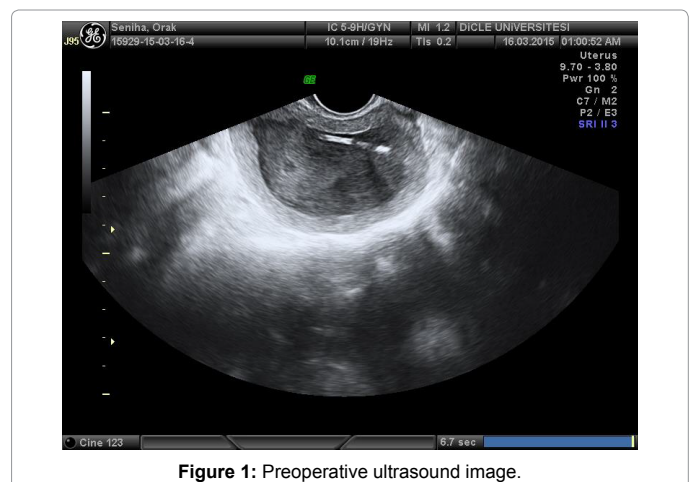


Figure 1: Preoperative ultrasound image.

for the patient. After the hysterectomy, the uterus was incised open and a discharge of foul-smelling pus was observed therein. In addition, the IUD was seen in the cavity although its string had not been observed in the cervix (Figure 2). The uterine wall had been diminished to a great extent. The patient was subject to postoperative follow-up. On postoperative day 3, the patient was discharged from the hospital with an oral double antibiotic treatment as her general condition was observed to be well and her vitals stable.

Discussion

PID is an infection of the upper female genital tract that involves

***Corresponding author:** Fatih Mehmet Findik, Department of Obstetrics and Gynecology, Dicle University, Turkey, Tel: +90 412 241 1000; E-mail: fatihmf@gmail.com

Received November 02, 2015; Accepted December 02, 2015; Published December 09, 2015

Citation: Findik FM, Agacayak E, Icen MS, Evsen MS, Firat U, et al. (2015) Uterine Abscess Caused by the Use of Intrauterine Device in a 62-Year-Old Patient: A Case Report. J Clin Case Rep 5: 676. doi:10.4172/2165-7920.1000676

Copyright: © 2015 Findik FM, et al. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.



Figure 2: Macroscopic image of the uterus abscess.

one or all of the uterus, oviducts and ovaries. With its primary risk factor being sexual intercourse, PID is generally observed among young women. Its incidence gradually decreases after the age of 35. It is rarely observed in postmenopausal women. The patient concerned in this paper was 62 years old and had been in menopause for 12 years. IUD leads to a slight increase in the risk of PID among patients [3-5]. The risk of PID particularly covers the first three weeks following the insertion of an IUD and gradually decreases after the end of this period [5]. A study in the literature suggests the removal of the IUD to ensure clinical treatment of patients [6]; however, most guidelines recommend the retention of the IUD in place and close follow-up with antibiotic treatment in acute PID [7-9].

The commonly observed symptoms of pelvic actinomycosis are abdominopelvic pain, abdominal mass, constipation, fever, and weight loss [10]. Eighty-five percent of the cases are women that have been using IUD for 3 years or longer. Actinomyces is present in normal vaginal flora, and therefore, the presence of symptoms is of great importance for treatment. In the patient reported in this paper, the IUD was still in place after 16 years even though the patient was already menopausal, and this increased the risk of PID. In addition, the fact that the IUD could not be removed for a long period of time due to the lack of any string in appearance and thus led to the formation of an abscess

in the uterus resulted in the consideration of actinomycosis infection, which was then confirmed with the pathology report. In conclusion, patients must be informed on the conditions of IUD use, on the fact that long-term use must be avoided, and on the recommendation of postmenopausal removal. We, as physicians, must question the duration of IUD use in the follow-up examinations of female patients with IUD presenting to clinics of gynaecology and obstetrics. If the patient states that she has been using the IUD for an extended period of time, a recommendation must be put forth for its removal on the examination table, and if she refuses this option, analyses must be performed as necessary for the possibility of PID.

References

1. Strikas RA; Centers for Disease Control and Prevention (CDC); Advisory Committee on Immunization Practices (ACIP); ACIP Child/Adolescent Immunization Work Group (2015) Advisory committee on immunization practices recommended immunization schedules for persons aged 0 through 18 years--United States. *MMWR Morb Mortal Wkly Rep* 64: 93-94.
2. French CE, Hughes G, Nicholson A, Yung M, Ross JD, et al. (2011) Estimation of the rate of pelvic inflammatory disease diagnoses: trends in England, 2000-2008. *Sex Transm Dis* 38: 158-162.
3. Workowski KA, Berman SM (2006) Centers for Disease Control and Prevention. Sexually transmitted diseases treatment guidelines. *MMWR Recomm Rep* 55: 1.
4. Lee NC, Rubin GL, Borucki R (1988) The intrauterine device and pelvic inflammatory disease revisited: new results from the Women's Health Study. *Obstet Gynecol* 72: 1-6.
5. Grimes DA (2000) Intrauterine device and upper-genital-tract infection. *Lancet* 356: 1013-1019.
6. Altunyurt S, Demir N, Posaci C (2003) A randomized controlled trial of coil removal prior to treatment of pelvic inflammatory disease. *Eur J Obstet Gynecol Reprod Biol* 107: 81-84.
7. Centers for Disease Control. Sexually Transmitted Diseases Treatment Guidelines 2010.
8. Ross J, Judlin P, Jensen J; International Union against sexually transmitted infections (2014) 2012 European guideline for the management of pelvic inflammatory disease. *Int J STD AIDS* 25: 1-7.
9. Harmouch T, Znati K, Elfatemi H, Chbani L, Bennis S, et al. (2008) [Solid pseudotumoral tubo-ovarian actinomycosis. A case report in Morocco]. *Med Trop (Mars)* 68: 287-289.
10. Schmidt WA (1982) IUDs, inflammation, and infection: assessment after two decades of IUD use. *Hum Pathol* 13: 878-881.