

Case Report

Retained intrauterine device, Lippes loop intrauterine device, for 40 years as unusual cause of chronic pelvic pain in 70 years old woman in Western Ethiopia

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ABSTRACT

Chronic Pelvic Pain (CPP) is defined as chronic or persistent pain perceived in structures related to the pelvis for at least 6 months. This condition accounts for 10% of all outpatient gynecology visits and it significantly affects patients' health. Etiologies of chronic pelvic pain are multifactorial in nature and vary with patients' age. But retained intrauterine device in the uterus beyond its expiry date was not reported as the cause of chronic pelvic pain in postmenopausal age group. This case is presented to show that retained (expired) intrauterine device left in situ in postmenopausal woman could cause chronic pelvic pain. In conclusion, intrauterine devices *in situ* should be remembered at menopause and removed per the guideline before it causes problems and unnecessary interventions.

Keywords: Intrauterine device, Chronic pelvic pain

INTRODUCTION

Chronic Pelvic Pain (CPP) is defined as chronic or persistent pain perceived in structures related to the pelvis for at least 6 months.¹ The prevalence of chronic pelvic pain varies; it may affect 5% to 15% of women at some time in their lives, predominantly during their reproductive years with estimated rate of 12% to 39%.^{2,3} This condition accounts for 10% of all outpatient gynecology visits.⁴

CPP is a multifactorial condition with possible sources from urogynecological, gastrointestinal, musculoskeletal, and/or in the nervous system, making the differential diagnosing challenging.^{3,5} This case report presents retained intrauterine contraceptive device as an uncommon cause of chronic pelvic pain in

postmenopausal woman. Simple removal of this device resulted in resolution of symptoms.

The intrauterine device (IUD) has been used for contraception for a long period of time since its invention in the late 1920s by Dr. Gräfenberg.⁶ In 1962, Jack Lippes, a gynecologist in New York, developed a smaller, plastic IUD (Lippes loop intrauterine device) that became more popular. It was a plastic double "S" loop, a trapezoid shaped IUD that closely fit around the contours of the uterine cavity, reducing the incidence of expulsion. This IUD was commonly used from the 1960's to the 1980's.⁶⁻⁸

Modern devices for intrauterine contraception are made of plastic and release either copper or a progestin to enhance the contraceptive action of the device.⁹

CASE REPORT

A 70 years old para VII (6 alive) mother, postmenopausal for 20 years, who was admitted to Gimbie Adventist hospital located in Western Ethiopia after she presented with on and off type of pelvic pain of two years for which she frequently visited health centers and hospitals where she was treated with different antibiotics but with no improvement. During the current visit, she has exacerbation of the pelvic pain for the last one month. She also complains headache. But there is no vaginal discharge or vaginal bleeding. She has no previous surgery or chronic medical problem.

When asked about her contraception history, she reported that she had the chance of using IUD which was inserted 40 years back in the hospital. After 10 years of its insertion, she visited the same hospital for removal of IUD. She was examined and told that the device has probably expelled spontaneously.

On examination, her general condition was good. The positive findings were atrophic cervix with stenosed cervical os and tip of thread buried into cervical tissue when seen on speculum exam. There was also mild uterine tenderness on bimanual palpation. Trans-abdominal ultrasound showed opacity in the uterus. Laboratory investigations like complete blood count, urinalysis and organ function tests were normal.

With the impression of retained intrauterine device, she was admitted and three doses of misoprostol 400 micrograms were inserted every 6 hours. The next day, dilatation and curettage and traction of thread with spongy forceps were tried but there was resistance to remove the device. In the hospital, there was no hysteroscopy which could be used as the diagnostic tool and therapeutic procedure. The patient was then prepared for laparotomy with the possibility of embedment of the myometrium with the device. After incising the uterus anteriorly (hysterotomy), intra-operative findings were Lippes loop IUD device partly embedded into the myometrium and with the threads retracted into the uterine cavity. It was then carefully removed (Figure 1).



Figure 1: Lippes loop intrauterine device removed at Gimbie Adventist hospital, Gimbie, Western Ethiopia, September 2014.

The patient was discharged in good condition on 3rd postoperative day and on follow up she reported that the symptom has resolved.

DISCUSSION

Chronic pelvic pain is one of major complaints to gynecologic outpatient visits. It is multifactorial in origin with numerous etiologies requiring stepwise approach.²⁻⁵ However, meticulous patient approach and ultrasound examination are vital in resource limited settings as in this case.

There have been reported cases of prolonged usage of the IUD causing postmenopausal bleeding⁶ but chronic pelvic pain during post-menopausal period as complication of retained IUD was not reported to the best of our knowledge.

This patient presented with unusual cause of CPP at 70 years, retained intrauterine device, which was there for 40 years. The pain might result from embedment of uterine wall by the device, recurrent pelvic inflammatory disease, chronic inflammatory response of the endometrium or uterine contraction to expel the device.^{6,9,10} From this case report, physicians can consider retained IUD as one of the differential diagnosis of chronic pelvic pain in postmenopausal period.

Though there are various medical methods used for cervical ripening prior to removal of retained IUD,¹¹ its removal in post-menopausal period is not simple as the cervix is stenotic and most IUDs do not have a thread attached. In this case, though misoprostol was used, the cervix was atrophic with stenosed cervical os and there was embedment of myometrium with the device both of which probably made removal through vaginal approach difficult necessitating more invasive procedure i.e. hysterotomy. This patient could have benefited from hysteroscopic removal of the device if the hospital had the setting.

The other important point in this patient is also the fact that health care team didn't consider retained intrauterine device during the patient's initial visit after 10 years of using the device and frequent visits because of her pelvic pain. Whenever one is not sure whether IUD was expelled spontaneously or not, as in this case, it is advisable to consider consultation and/or referral to better set up where the patient can get better evaluation and timely removal before the development of problem(s) like chronic pelvic pain.

CONCLUSION

From this case report we have seen that prolonged use of IUD, particularly Lippes loop IUD, beyond its expiry date as an unusual cause of chronic pelvic pain in postmenopausal period necessitating unnecessary intervention. So, it is advisable to remove intrauterine

devices at or one year after menopause^{9,11} and also the health sector should monitor whether the clients are getting modern intrauterine devices per its guideline.

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