

Incidentally discovered extrauterine migration of a Lippes loop: should we let it stay?

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ABSTRACT

Intrauterine devices (IUDs), a form of long-acting reversible fertility control, are often preferred for preventing pregnancy. The Lippes loops, made of plastic, are inserted into the uterus via the cervix, fitting into the uterine cavity. The non-medicated (inert) structure of the loop allows for long-term IUD use. Uterine perforation and translocation of the IUD are the most threatening complications. In this case report, we present an asymptomatic 79-year-old woman with a forgotten IUD that migrated into the abdominal cavity and was discovered during her follow-up for lung cancer.

Keywords: Lippes loop, Intrauterine devices, Intrauterine device migration

INTRODUCTION

An intrauterine device (IUD) is a small plastic and copper material inserted into the uterine cavity and protects against pregnancy (1). The Lippes loop is a primitive form of IUD, which was introduced in the early 1960s by Jack Lippes as a contraceptive method (2). The double-S shaped polyethylene loop can be easily placed into the uterine cavity (3). The Lippes loop lost popularity and was replaced by other copper-containing contraceptive devices in the 1980s (2,3). Lippes loops do not contain bioactive components and their main mode of action is to block fertilization and implantation by creating a sterile inflammatory

response. Prolonged use of the Lippes loop is common; however, it may cause complications including bleeding, infection, perforation of the uterus, and translocation of the Lippes loop into the abdominal cavity, as observed in our case (3-6).

CASE REPORT

We present a case of an intrauterine contraceptive device that migrated to the abdominal cavity without causing any complaint. The patient was a 79-year-old Turkish woman with a history of wedge resection for lung adenocarcinoma, who also received radiation therapy and erlotinib. During her follow-up,

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abdominothoracic computerized tomography (CT) scan revealed a retained and translocated double S-shaped loop in the abdominal cavity incidentally (Figure 1). The patient's medical history included seven pregnancies and one miscarriage, with menopause occurring 38 years ago. The IUD was inserted 53 years ago, following her last birth in 1970. A retrospective review of past medical records and images revealed that the IUD was in a similar position in the lumbar spine X-ray obtained four years ago and an erect posteroanterior (PA) abdomen X-ray acquired a year ago. She was symptom-free during the entire period. The patient consulted with both a general surgeon and a gynecologist four years ago. She refused surgical intervention, and opted to attend regular physical examinations.

DISCUSSION

The primary effect of different types of IUDs is to prevent fertilization by inducing an inflammatory response that disrupts the uterine environment (7,8). Lippes loops are non-medicated IUDs that are cost-effective, easy to install, and do not need to be replaced regularly (2,3,6). IUD is recommended to be removed after menopause, however, Lippes loops can be left for an extended time if it is not causing any complaint (2,3,6). Our patient had forgotten about the Lippes loop and reported that she had been symptom-free for many years. The most common complications of IUDs are pelvic infections, increased menstrual bleeding, pain, expulsion, and perforation of the uterus. Uterine

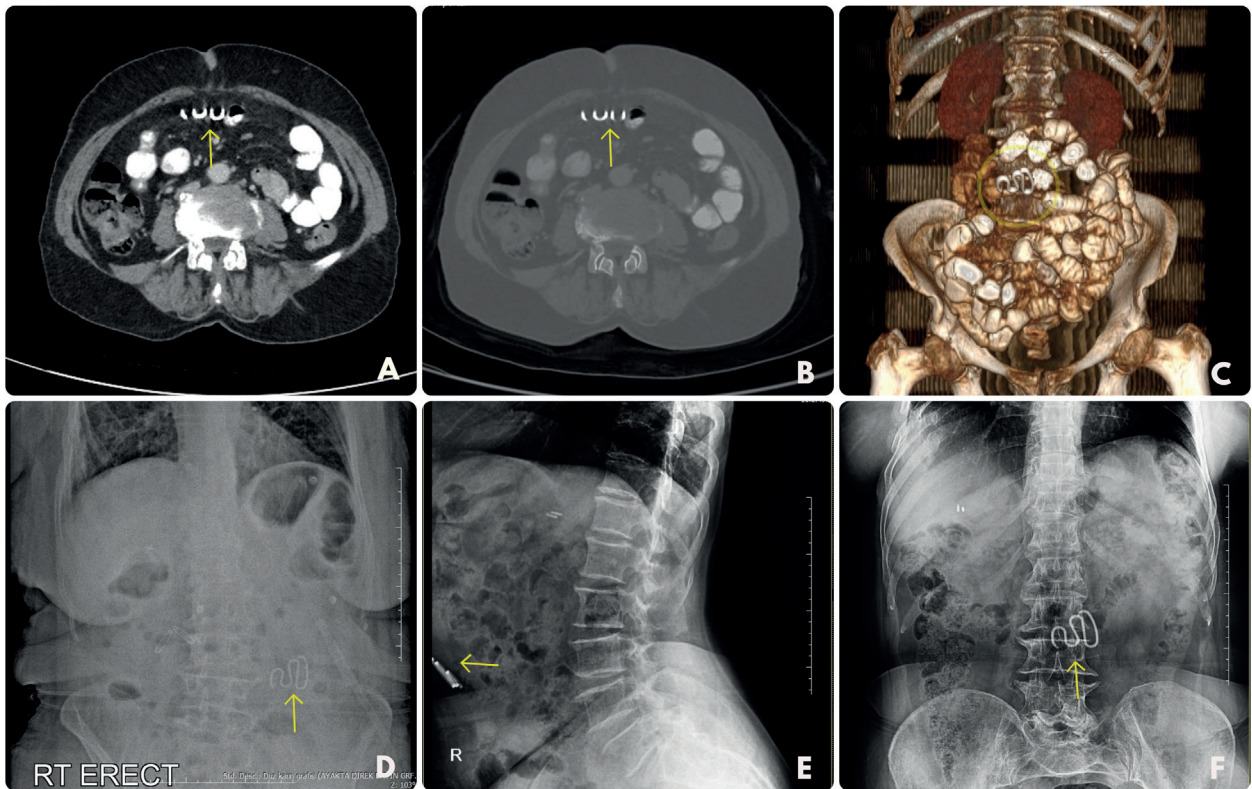


Figure 1. Images A and B are axial CT images abdomen window and bone window respectively and image C reveals a volume-rendering CT image. Image D is a PA Erect abdomen X-ray obtained one year prior to CT scan, images E and F are lateral and PA lumbar spine X-rays four years prior to CT scan. The lippes loop is indicated by an arrow or a circle in each image.

perforation is the most dangerous complication of all, often occurring at the time of insertion, particularly during the puerperium (4,9). The incidence of IUD migration is 1-4 cases per 1000, depending on the degree of myometrial penetration classified as partial or complete (3,4). The duration of retained uterine devices ranged from 22 to 50 years according to a study conducted by Bharathi et al (3). In our case, the Lippes loop was inserted 53 years ago, and according to previous images of the patient, IUD was outside of the uterus for at least four years without complaints. The low perforation rates might be associated with the misdiagnosis of complications (6). Fifty-three years of use of the Lippes loop, and a history of at least four years of extrauterine migration had no negative effect on the patient's health. The concerns about the safety of the Lippes loop may warrant reconsideration in light of this particular case, and it could be advisable to evaluate the necessity of surgical interventions.

Ethical approval

Written informed consent was obtained from the participants.

Author contribution

Surgical and Medical Practices: OHA; Concept: ABY; Design: ABY, ED; Data Collection or Processing: ABY; Analysis or Interpretation: ABY, ED; Literature Search: ABY, OHA; Writing: ABY. All authors reviewed the results and approved the final version of the article.

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Conflict of interest

The authors declare that there is no conflict of interest.

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