# **An Unusual Complication of Intrauterine Device**

# Nurgul ULUSOY<sup>1</sup>, Hediye DAĞDEVİREN<sup>1</sup>

## **Abstract**

We present a case of an unusual complication of intrauterine device (IUD). Uterine perforations are among the most serious complications associated with the insertion of an intrauterine device. In this case, the perforation involved the cervical wall and it was asymptomatic for a period of unknown time. Inadequate pelvic examination before insertion and inexperience of the inserting person might be predisposing factors for uterine perforation. We suggest that the patient should be counseled on self-maintenance and checking for the threads one month after insertion and regularly thereafter.

Keywords: Hysteroscopy, Intrauterine device, Uterine perforation

## Rahim İçi Araç ile İlgili Nadir Görülen Bir Komplikasyon

## Öz

Rahim içi araç,3 ile ilgili nadir görülen bir komplikasyonu sunduk. Rahim içi araç ile ilgili en ciddi komplikasyon, uterin perforasyondur. Bu vakada perforasyon servikal kanal duvarına doğru olmuş ve ne zaman olduğu bilinmemektedir. Yetersiz pelvik muayene ve işlemi uygulayan kişinin yeterince deneyimli olmaması perforasyon oluşma riskini arttırmaktadır. Bizce en önemli şey, kadının rahim içi aracı uyguladıktan sonra düzenli aralıklarla kendi kendine muayene ile aracı belli aralıklarla kontrol etmesidir.

Anahtar Kelimeler: Histeroskopi, rahim içi araç, Uterin perforasyon

Dr. Nurgul Ulusoy, Istanbul Aydin University Medical Faculty Department of Obstetric and Gynecology, İstanbul. nurgul.ulusoy@iauh.com.tr

### Introduction

An intrauterine device (IUD) should be inserted by specially trained personnel, a regular follow-up post insertion should be mandatory. The mislocated IUD may cause many complications, the most important and fatal being uterine perforation. In this report, we have presented a case of uterine cervical perforation which remained silent for probably a couple of years (1-4).

## Case Report

A 40-year old nulliparous woman, referred by her general practitioner, was presented with a history of 12-years-old IUD the tail of which does not appear. She was using a T shaped intrauterine device (TCu 380A) for contraception that was inserted 12 years previously. This insertion was apparently uneventful. Her last cervical smear was eight years ago and she had never checked for the threads of the IUD. Pelvic examination revealed an 8-week sized uterus. The cervical appearance looked healthy but the tail of the contraceptive device was not evident. Also, during the cervical examination, there was a defective area like a hole on the anterior wall of the cervix at the localization of eleven a clock. When we examined this area with a pair of forceps, we pulled out IUD's tail from this area. However, the threads were already in the cervical canal and wall. Pelvic ultrasound confirmed uterus and ovaries were normal and the IUD was visualized in cervical canal and wall partially. It was presumed that the IUD had been spontaneously expelled into a cervical wall and transmigrated into vagina. The tail and threads were penetrating through and extending into the cervix (Figure 1).



**Figure 1:** Intrauterine device transmigration into cervical wall

In view of these findings, a hysteroscopy was performed. The vertical copper-bearing limb of the IUD was extruded from the cervical canal using hysteroscopy, and the IUD was removed completely. Patient was discharged after an uneventful postoperative period.

### Discussion

This is a report of an asymptomatic IUD transmigration into cervical wall. Incidence of mislocated IUD may be affected by the type, the timing of the insertion relative to the time from the termination of pregnancy (post-abortion or postpartum), the position of the uterus, the insertion technique and the skill of the individual inserting the device (5). In this case, it was a 'TCU 380A' IUD inserted 12 years ago and the insertion was reported to be uneventful. Uterine perforation occurs at the time of insertion and is often asymptomatic (6). However abdominal pain and vaginal bleeding occurring during or shortly after insertion is an indication of a possible perforation (6).

In this case, the perforation involved the cervical wall and it was asymptomatic for a period of unknown time. This was not associated with any symptoms and signs. The presence of copper in the cervical cavity can lead to adhesion formation, abdominal pain, pregnancy with IUD, abnormal vaginal bleeding.

An IUD should be inserted by specially trained personnel, a regular 6-week follow-up post insertion should be mandatory. The patient should be counseled on self-maintenance and checking for the threads 1 month after insertion and regularly thereafter (6). In cases of missing IUD threads, an ultrasound scan alone is a poor predictor of location as it is being operator dependent may make interpretation more difficult. X-rays can improve the probability of IUD location and computer tomography can also be used in such cases with success (4).

Inadequate pelvic examination before insertion and inexperience of the inserting person might be predisposing factors for uterine perforation. All data suggest that most of the uterine perforations by IUDs are initiated during insertion, thus more attention should be paid to pelvic examination before IUD insertion. If pain or difficulty in insertion occurs, the location of IUD should be controlled by an ultrasound to be inside the uterine cavity. In the following visits, if the string of the IUD is missing, USG should be performed to locate the IUD. If insufficient, abdominal X-ray may be done to reach a definitive diagnosis.

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