

# Uterine Perforation after Pose of IUD, the Place of Abdomen Radiography without Preparation

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## Abstract

Uterine perforation is a serious complication after insertion of an intrauterine device (IUD). We report the case of a 34-year-old woman receiving in consultation for abdominal pain. In the interrogation there was a notion of IUD insertion for about a week. The gynecological examination did not find the thread of IUD and the ultrasound performed did not visualize an IUD. Radiography of the abdomen without preparation highlighted a compatible intrapelvic foreign thing like an IUD. The diagnosis of pelvic inflammatory disease by uterine perforation by an IUD was thus retained. We suggest in case of suspicion of uterine radio opaque IUD perforation achieving radiography when the abdominal pelvic ultrasound is normal.

## Keywords

IUD, Intra, Uterine Perforation, Diagnosis, Treatment

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## 1. Introduction

The intrauterine device (IUD) is an effective contraceptive method with long duration action used in our country as part of family planning [1]. However, its installation can sometimes be a source of major complications such as uterine perforation. This is a rare and serious complication which can cause a diagnostic problem in our context where the technical equipment is often lacking. In this article, we propose to illustrate through observing the place of abdomen radio-

graphy without preparation in the diagnosis of uterine perforation by an IUD.

## 2. Observation

Mrs T/G N, 34, secretary-accountant, living in Ouagadougou, was 4th and 2nd parity gesture (2 living children, 1 caused abortion and 1 miscarriage). An intra-uterine device (DIU) had been set up in a therapeutic purpose. One week after this act appeared abdominal pains. The gynecological examination did not find the thread of IUD. Pelvic ultrasound performed thereafter did not highlight the DIU in the pelvis. It was concluded then a spontaneous loss of the IUD. The patient was referred to gastroenterology consultation February 19, 2014, one week later. Pelvic pains belonged to type of twisting activated by food intake, relieved by vomiting and associated with a low grade fever especially Vespers at 38°C and asthenia.

Clinical examination was poor with a fairly good health, non-icteric colored conjunctiva.

The abdomen was without spasm but with significant defense in the pelvic region.

Paraclinic exploration highlighted an inflammatory anemia without leukocytosis in the blood count, with an accelerated erythrocyte sedimentation rate 80 mm in the first hour. The abdominal-pelvic ultrasound found a minimal peritoneal effusion. The high and low endoscopies were normal. An endovaginale ultrasound realized was also without particularity. Tests of HIV 1 and 2, B and C virus hepatitis were negative. Hepatic and cardiac assessments were also without particularities.

Radiography of the abdomen without preparation (ASP) showed a foreign body intra-pelvic seems like an IUD (**Figure 1**).

The diagnosis of pelvic inflammatory disease by uterine perforation by an



**Figure 1.** Radiography of the abdomen without preparation (ASP) showed a foreign body intra-pelvic seems like an IUD.

IUD was retained. Surgery confirmed the diagnosis. The postoperative sequences were simple.

### 3. Discussion

The uterine perforation by IUD is easily evoked during the appearance or the accentuation of pelvic pain after the pose of IUD and when we cannot find the threads during a gynecological check. This was the case of our patient. The IUD, or intrauterine device (IUD) is a means of reversible contraception and widely used. Its insertion constitutes an invasive procedure and not deprived of complications such as pains, bleedings, infections, spontaneous expulsions, perforations and even pregnancies. This perforation is related to various factors such as: operator inexperience, the introduction strength and uterine causes (weakening of the myometrium by multiple pregnancies and cesarean). Our patient, 4th gesture enjoyed that contraception after an abortion. Uterine perforation is the most serious complication occurring during the insertion. The frequency of this complication ranges from 0.05 to 13 for 1000 insertions of the DIU, that is on average 1.2 for 1000 [2] [3] [4]. Uterine perforation can be partial or complete with the IUD in the abdominal cavity. Perforation is suspected in front of especially pelvic pains and the disappearance of threads of the IUD during gynecological examination, such as find in our patient's

The imaging is a great benefit in the topographical diagnosis of the migrated IUD.

The abdominopelvic ultrasound is then indicated in the first intention [5] [6]. It shows a uterine cavity without IUD or an IUD in para-uterine. Sometimes it didn't find IUD but cannot assert the uterine perforation. The endovaginale ultrasound is a better yield to appreciate the uterine vacuity. In our patient, it was performed twice and was not contributory. This examination did not find the IUD in extra uterine. If the IUD is not observed through echotomy, we shall refer to the recommendations that prescribed a computed tomography (CT) or Magnetic resonance imaging (MRI). The radiography of the abdomen without preparation lost its place in this indication in front of these new imaging techniques. The radiography of the abdomen without preparation realized at our patient after exploration of the other diagnostic hypotheses allowed to highlight a pelvic foreign body which was other than the DIU. Indeed all the IUD is radio-opaque and can be highlighted to the standard radiography of the abdomen without preparation. Seen the reduced accessibility of the new imaging techniques in our context and the radio-opacity of the IUD, we think that it is necessary to give to the ASP the place of examination of second intention [7] [8] [9] [10]. In addition, providers should insist on post-insertion control and signs of danger requiring consultation before IUD insertion

The treatment of uterine perforation after IUD insertion will be to his removal under hysteroscopy if incomplete perforation or laparoscopic/laparotomy for complete perforation associated with primary closure and/or resection [11] [12].

## 4. Conclusion

The ASP should be the second examination to be carried out in the regions in case of suspicion of uterine perforation by a radiopaque IUD with normal abdominopelvic ultrasound.

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