Pelvic Mass Due to Transmigrated IUD

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Abstract- Intrauterine device (IUD), a conventional method of contraception is rarely associated with uterine perforation and extra uterine dislocation. A 29 years old woman complaining of vaginal bleeding was referred for pelvic mass identified in ultrasound. The mass was confirmed with CT scan. In laparatomy we found an IUD in cul-de-sac and pelvic mass was apparently an organized hematoma. Transmigrated IUD can induce organized hematomas presenting as a pelvic mass.

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Keywords: Intrauterine devices; pelvis; uterine perforation

Introduction

Intrauterine devices (IUDs) are safe and effective methods of long-term reversible contraception inserted transvaginally usually during menstrual cycle (1,2). Rarely perforation of uterus may occur during the procedure and IUD transmigrates into another place and can involve several neighboring organs. Uterine perforation is a rare complication with an incidence of less than one case per 1000 insertion, but can cause severe morbidity (3,4). The risk factors for uterus perforation by IUD is type of IUD, the uterus position and size, congenital anomalies, infections, history of abortion, and insertion in the postpartum period due to the thinness of uterine wall (4,5).

Case Report

A 29-year-old woman with a pelvic mass was referred to our gynecology oncology department for evaluation and surgery. She complained of vaginal bleeding for the last two mounts. Pelvic ultrasound showed a solid mass with internal echo about 120.90 mm in posterior cul de-sac. CT Scan revealed a mass with rectal origin. Incidentally, CT Scan showed the presence of a hyperdense structure compatible with metal located in abdomen. The patient did not mention any history of previous surgery and trauma. She remembered an IUD insertion 3 years ago, which was removed by a midwife 1 month later, due to severe vaginal bleeding.

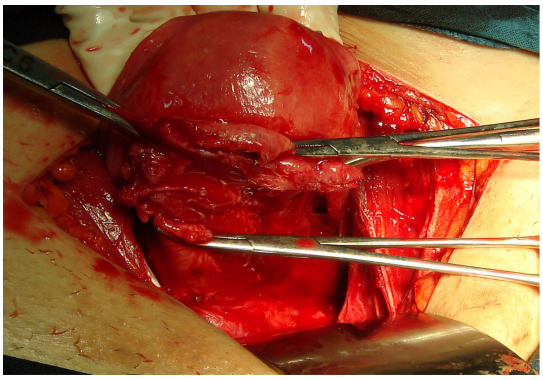

Figure 1. Pelvic mass about 10*12 cm in posterior uterus and anterior of rectum wall

Figure 2. Pelvic CT scan showed the mass was originated from rectum and incidentally CT scan showed the presence of a hyper dense structure compatible with metal was located in abdomen

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Further, investigation by rectosigmoidoscopy showed a rectal polyp and internal hemorrhoid. During laparatomy for resection of the pelvic mass, an IUD was seen in the parietal peritoneum and we found a pelvic mass about 10.12 cm in posterior uterus and anterior the rectum wall. Apparently, it was an organized hematoma that was confirmed by a pathologist.

Discussion

Perforation of the uterus by an IUD is a serious complication occuring 1/350 to 1/2500 insertions (6). The transmigrated IUD may cause infection and abdominal pain, intestinal obstruction and adhesion formation. It can involve several organs such as bladder and bowel leading to perforation and associated complications. Also some signs and symptoms suggestive of perforation (pelvic pain, bleeding) may seem apparently asymptomatic (7,8). The majority of perforations is not recognized at the time of the insertion and may not be identified until years afterwards. In previous reports, IUD was detected in some sites. It was found in the lower anterior abdominal wall that had been inserted 12 years before (9). IUD was incidentally detected on lumbar spine X-rays and confirmed by CT scan that secondary to asymptomatic uterine perforation occurred at the time of insertion 17 years ago (4). Tienelli and colleagues reported a uterine perforation due to IUD migration in the retzius space (10). Khanza et al reported an intrauterine contraceptive device (LNG-IUS) migrated from the uterus to the bladder and resulted in stone formation (6). In conclusion, we should be aware of the possibility of IUD migration and consequent perforation that may induce bleeding and organized hematoma in site of perforation as a mass. Therefore, hematoma induced by IUD migration can be one of the differential diagnoses of pelvic mass, especially in patients with a foreign body as an IUD.

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