



Intrauterine Contraceptive Device Migration Presenting as an Abdominal Mass

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Abstract:

A number of complications are reported with use of IUCD in literature. On one extreme the complications may remain completely asymptomatic and on the other extreme it may manifest as an emergency. We are reporting a unique case in which a migrated IUCD presented as an anterior abdominal wall mass in a 28 years old female patient. Laparotomy was done and impacted foreign body was retrieved. This case highlights, the rare manifestation of migrated contraceptive device.

Key words: Contraceptive Devices, Foreign Bodies, Intrauterine Devices, Laparotomy, Omentum.

Introduction

One of the effective, safe and economic methods of contraception is intra-uterine contraceptive device. Migration of IUCD (intra-uterine contraceptive device) is rare, but possible serious complications associated with its use, restricts its utilization by a large part of general population [1]. The IUCD can get migrated through transuterine pathway or via fallopian tube. Depending on site and severity of involvement, migration of IUCD pursues an asymptomatic course or presents with varying abdominal symptoms and signs [2]. Radiological investigations like X-ray abdomen, ultrasound, CT scan can detect migrated IUCD. An open or laparoscopic approach are used to retrieve migrated IUCD depending on facilities, expertise and nature of migration

Case Report

A 28 years old female reported to our OPD services with progressive swelling at left para-umbilical region. The patient had noticed swelling about 4 months back and was gradually increasing in size. This was associated with mild aching pain. There was no history of previous surgery, increase in size on coughing, trauma, fever, constipation, bleeding per rectum, vomiting.

The patient was evaluated clinically; general physical examination revealed no abnormality. Abdomen examination revealed a swelling in left para-umbilical region, becoming prominent on leg raising. The swelling was free from overlying skin but fixed to underlying muscle having dimensions of 7.0×3.2×1.6 cms. Per rectal and per vaginal examinations were normal.

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X-ray abdomen revealed a possible foreign body with ultrasound abdomen revealing thickened anterior abdominal wall corresponding to swelling. CT scan was done which revealed a thickened abdominal wall with adherent omentum and a hyperdense shadow within swelling suggestive of a foreign body [Fig.1]. Cyto-pathological diagnosis using fine needle aspiration was not helpful as it revealed only chronic inflammatory cells.

On retrospective questioning, patient gave history that she had delivered her first issue about 6 years back and second issue 3 years back. Following this, she used Cu-T IUCD for contraception. She again became pregnant despite in situ IUCD within one year. Patient was seen by some practitioner and was told that IUCD has been probably expelled without her knowledge. Thereafter patient had delivered her third issue and was having no complaints as such for about 6 months post-delivery.

In view of long history and anticipation of firm adhesions an open approach was performed. Exploratory laparotomy was done and IUCD embedded in rectus muscle wrapped within omentum corresponding to the site of perforated uterine wall was found [Fig.2]. The device was removed along with wrapped omentum [Fig.3,4] and local repair of tissues was done. Post-operative period was uneventful. Patient is on our regular follow up.

Discussion

In developing countries, IUCD devices form one of the integral part of family planning methods. These are considered as one of the cost effective contraceptive devices. Various IUCD devices are available but copper containing devices are most common and include Cu T200, Cu T380, multiload Cu T250. The design, copper content, method of placement and timing determine side effect profile of device. The complications associated with IUCD usage include dysmenorrhea, pelvic inflammatory

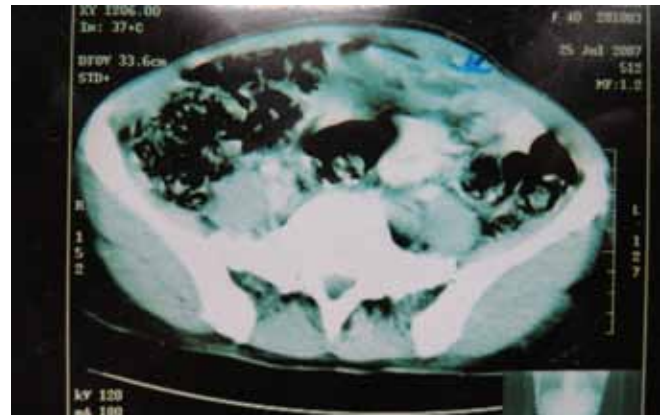


Fig.1: CT scan of abdomen showing hyperdense shadow within swelling suggestive of a foreign body.

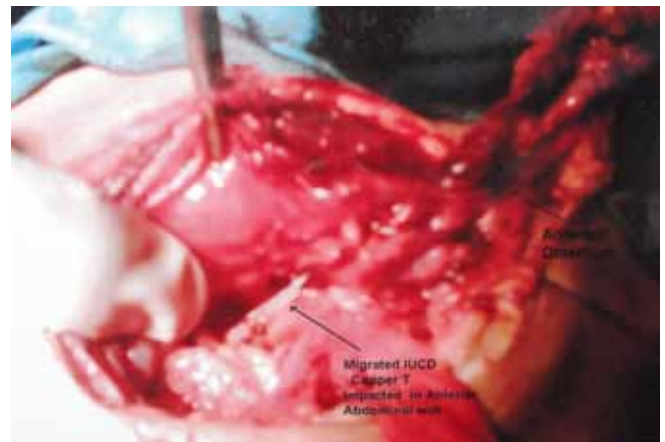


Fig.2: Intra-operative picture of IUCD attached to rectus with adherent omentum.



Fig.3: Excised adherent omentum.

disease, septic abortion and hydrosalpinx. Perforation of uterus is rare.

Perforation may be complete or incomplete. In former type, device remains attached to myometrium while in later, the device may be present anywhere in abdominal cavity. Risk factors for migration are nulliparous female, post-partum or post abortion insertion, faulty technique and irregular follow up [3]. Though a rare phenomenon, the migrated device can lead to dreadful complications [4]. The incidence reported being 1/350 to 1/2500 insertions [5]. Inert positioning, fragility of uterine wall due to recent birth, abortion and pregnancy are contributory to possibility of uterine perforation [6]. After perforating uterine wall IUCD can migrate to colon, wall of iliac vein, bladder, appendix, omentum, perirectal fat, retroperitoneal space pouch of Douglas and ovaries. In bladder it may lead to calculi formation [7].

Regular self-examination, investigation of persistent pain or disappearance of strings may detect migration early [8]. X-ray abdomen, ultrasound, CT scan are usually used for diagnoses and are adjuncts in locating site of impactions. Transvaginal ultrasound visualizes IUCD easily.

There are proponents of leaving migrated IUCD as such, but are not well supported in literature. All copper containing devices require laparotomy for removal as copper causes tissue reaction [9]. Detection of asymptomatic migrated IUCD contraceptive device needs retrieval to discourage psychosomatic symptomatology. IUCD that has migration should be considered even in asymptomatic patients due to risks from adhesion formation such as bowel obstruction and infertility [10]. Laparoscopy and laparotomy are treatment options available. Laparoscopy has an advantage of localization and removal of IUCD with full local assessment.



Fig.4: Retrieved IUC device.

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