SAS Journal of Surgery
Abbreviated Key Title: SAS J Surg
ISSN 2454-5104
Journal homepage: https://www.saspublishers.com/sasjs/

OPEN ACCESS

Chronic Persistant Umbilical Discharge in Young Female Due to Intrauterine Device– A Case Report

Dr. Samir S Deolekar MS[1], Dr. Sridhar Suresh MS[2*]

[1]Associate Professor, [2]Assistant Professor, Department of General Surgery, Seth Gordhandas Sunderdas Medical College & King Edward Memorial Hospital Parel Mumbai 400012, India

DOI: 10.36347/sasjs.2020.v06i07.001 | **Received:** 26.06.2020 | **Accepted:** 03.07.2020 | **Published:** 08.07.2020

***Corresponding author:** Dr. Sridhar Suresh

Abstract | **Case Report**

Development of the umbilicus is one of the most complex embryological processes in human beings which subjects to large number of malformations. Majority of this malformations manifest in the neonatal period, rarely they manifest in early adult life as symptom of umbilical discharge. Common causes in adults for umbilical discharge are acquired conditions and foreign bodies. We report case of 24 year female with chronic umbilical discharege since 3 years. She had inserted Copper T 4 years back after her first delivery. During prenatal checkup of second pregnancy, Copper T was missing in in utero which was deemed that would have been expelled per vaginally. After second delivery Coper T was inserted in Post-paartum period. Later on she develop complaint of lower abdominal pain and persistent purulent umbilical discharge since 6 months. On investigation we found the previous Copper-T in between the Rectus sheaths on the right side which formed a tract and was draining a seropurulent discharge through the umbilicus.

Keywords: Chronic, Umbilical, Discharge, young, Intrauterine Device.

INTRODUCTION

Umbilical discharge in adults due to foreign bodies but can be quite alarming. The most common causes of umbilical discharge in adults are acquired conditions, such as pilonidal sinus disease [1, 2], infection due to hair tufts and foreign bodies [3], and non-specific acute and chronic inflammation and abscess of the umbilicus [4]. Patients with embryonal anomalies may present with umbilical discharge [5].

Using intrauterine device (IUD) is the most common method of contraception worldwide. However, there is a risk of its migration and damage to the intra-abdominal organs. According to the recent reports [6], perforation of the uterus by IUD is seen in 0.05 to 13 cases out of 1000 IUD insertions. The primary rupture of the uterus has been reported at the time of IUD insertion; however, the secondary or delayed rupture is more common and seems to be due to the spasms of the uterus [7].

CASE PRESENTATION

A 24 year old female came to our hospital with complaints of discharge from umbilicus since 3 years and swelling in the abdominal wall on the right side 2cms below and lateral to the umbilicus (Figure-1). She had a history of delivering a full term normal female baby 4 years back after which Copper T was inserted in the immediate postpartum period. One year before, she delivered again a Full term female baby. During the Pre-natal checkup of the second pregnancy the earlier Copper-T was missing in utero which was deemed that would have been expelled per vaginally. After the second delivery a Copper-T again was inserted in the immediate Postpartum period. Since 6 months patient complaint of lower abdominal pain and persistent purulent umbilical discharge. During routine investigations like X-ray and USG we found the previous Copper-T in between the Rectus sheaths on the right side (Figure 2 to 4) which formed a tract and was draining a seropurulent discharge through the umbilicus. Surgical removal was done (Figure 5, 6) under spinal anesthesia, with 5cm transverse incision over Copper- T site and patient recovered completely.

Fig-1: Showing discharging umbilicus and right palpable swelling

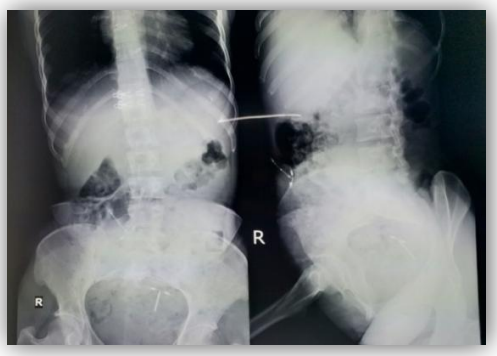

Fig-2: Showing erect abdomen and lateral Abdomen x-ray which shows intrauterine and displaced abdominal wall Copper T

Fig-3: Showing CT Abdomen with Intrauterine Copper T

Fig-4: Showing CT Abdomen with Abdominal wall Copper T

Fig-5: Showing Bead of the Copper T visible introperatively

Fig-6: Showing Whole Copper T removed intraoperatively

DISCUSSION

Migration of the IUD into the abdominal cavity occurs due to uterine perforation. Uterine perforation due to an IUD is seen in 0.05 to 13 cases out of 1000 IUD placements [8]. In our review of the literature, 165 cases of IUD migration have been reported since 1999. The most common places for this migration are the omentum, rectosigmoid colon, peritoneum, and bladder. Other rare places for IUD migration include the appendix, small intestine, adnexa, iliac veins, caecum, perirectal fat, retroperitoneal space, Douglas pouch, and ovaries [9-14]. Most of the authors recommend removal of the copper IUD in case of migration, because inflammatory responses can cause intestinal obstruction and visceral perforation [15].

There have been many case reports concerning IUD migration in literature, and almost every kind of IUD have been involved in this type of adverse event. Furthermore, the site of migration has been reported as being almost everywhere in the pelvic and intra-abdominal cavity. Regardless of whether IUD migration is caused by direct perforation of tissue or by

transportation through fallopian tubes, gynaecologic tissues other than endometrial cavity are the most affected targets. Secondary perforation of the uterine cervix, implantation in the broad ligament, implantation in an ovary, and implantation in a submucosal uterine myoma with growth of the myoma around the apparatus favoured have been widely reported. After the gynaecologic system, the urinary system and rectosigmoid colon have been found to be the next most commonly involved. The associated problems include uterovesical fistula, lower urinary tract symptoms caused by bladder perforation and calculus formation around the IUD, and stricture of the sigmoid colon. Gastrointestinal tract organs other than the rectosigmoid colon are seldom affected, but there have been reports involving IUD appendicitis and small intestine gangrene [16].

Prevention of IUD migration starts with following the right technique during IUD insertion and prevention of uterine perforation. IUDs should be examined periodically. An ultrasound is a simple, rapid and non-invasive imaging method to assess the position of the IUD[17] and to detect IUD displacement and treat it early.

CONCLUSION

Prevention of IUD migration starts with following the right technique during IUD insertion and prevention of uterine perforation. IUDs should be examined periodically. An ultrasound is a simple, rapid and non-invasive imaging method to assess the position of the IUD [17] and to detect IUD displacement and treat it early.

Migration of IUD may be frequent but migration to the abdominal wall is not known and not reported yet. Migration and implantation of IUD to abdominal wall though not life threatening but can produce significant symptoms in view of pain, abdominal wall abscess and umbilical discharge. A simple removal of the source of infection clears majority of the symptoms. We require more prompt reporting of such cases to more efficiently manage IUD migration and reduce complication.

We conclude that this case of IUD Migration to the abdominal wall which presents as a cause for umbilical discharge is unique and such case has been reported for the first time.

REFERENCES

1. Eryilmaz R, Sahin M, Okan I, Alimoglu O, Somay A. Umbilical pilonidal sinus disease: predisposing factors and treatment. World J Surg. 2005; 29: 1158-1160.
2. El-Bakry AA. Discharging umbilicus. Saudi Med J. 2002; 23: 1099-1100.
3. Sroujieh AS, Dawoud A. Umbilical sepsis. Br J Surg. 1989; 76: 687-688.
4. Molderez CM, Wouters KB, Bergsmans GB, Michiels GK. Umbilical discharge: a review of 22 cases. Acta Chir Belg. 1995; 95: 166-169.
5. Stroup SP, Thoman DS. A naval surgeon's approach to the draining umbilicus. J Laparoendosc Adv Surg Tech A. 2007; 17: 645-648.
6. Stuckey A, Dutreil P, Aspuru E, Nolan TE. Symptomatic caecal perforation by an intrauterine device with appendectomy removal. Obstet Gynecol. 2005; 105:1239-41.
7. Grimaldi L, De Giorgio F, Andreotta PD, Alessio MC, Piscicelli C, Pascali VL. Medicolegal aspects of an unusual uterine perforation with multiload-Cu 375R. Am J Forensic Med Pathol. 2005; 26:365-6.
8. Ozgu Aydogdu, MD, Huseyin Pulat, MD. Asymptomatic far-migration of an intrauterine device into the abdominal cavity: A rare entity. Can Urol Assoc J. 2012;6(3):E134-E136
9. Kassab B, Audra P. The migrating intrauterine device. Case report and review of the literature. Contracept Fertil Sex. 1999;27:696-700.
10. Sarkar P. Translocation of a copper 7 intra-uterine contraceptive device with subsequent penetration of the caecum: case report and review. Br J Fam Plann. 2000;26:161.
11. Silva PD, Larson KM. Laparoscopic removal of a perforated intrauterine device from the perirectal fat. JSLS. 2000; 4:159-62.
12. Roy KK, Banerjee N, Sinha A. Laparoscopic removal of translocated retroperitoneal IUD. Int J Gynaecol Obstet. 2000; 71:241-3.
13. Demir SC, Cetin MT, Ucunsak IF, Atay Y, Toksoz L, Kadayifci O. Removal of intra-abdominal intrauterine device by laparoscopy. Eur J Contracept Reprod Health Care. 2002; 7:20-3.
14. Ozdemir H, Mahmutyazicioglu K, Tanriverdi HA, Gundogdu S, Savranlar A, Ozer T. Migration of an intrauterine contraceptive device to the ovary. J Clin Ultrasound. 2004; 32:91-4.
15. Sharifiaghdas F, Mohammad AB, Abdi H. Laparoscopic removal of a migrated intrauterine device (case report). Urol J. 2007; 4:177-9.
16. Sun CC, Chang CC, Yu MH. Far-migrated intra-abdominal intrauterine device with abdominal pain. Taiwanese Journal of Obstetrics and Gynecology. 2008 Jun 1;47(2):244-6.
17. Aydogdu O, Pulat H. Asymptomatic far-migration of an intrauterine device into the abdominal cavity: A rare entity. Canadian Urological Association Journal. 2012 Jun;6(3):E134-E136.