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THE UNUSUAL PRESENTATION OF MISPLACED COPPER T PRESENTING AS PARIETAL WALL LUMP: A RARE ENTITY

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ABSTRACT:

This case report details the unique presentation of a misplaced Copper-T intrauterine device (IUD) as an abdominal wall lump in a 35-year-old female. The patient presented with a palpable lump on her abdominal wall, initially raising concerns of a hernia or lipoma. Further investigation revealed the presence of a Copper-T device embedded in the abdominal wall, necessitating surgical intervention. This case underscores the importance of considering uncommon etiologies in the differential diagnosis of abdominal wall lumps and highlights the need for a comprehensive diagnostic approach.

1. INTRODUCTION

Intrauterine contraception is a popular choice among females who seek long-term pregnancy prevention. It is the 2nd most commonly used contraceptive due to its ease of availability and low cost [1]. One of the reasons for discontinuation for 20-40% is the fear of complications like bleeding, uterine infection, uterine perforation, and spontaneous expulsion despite proper positioning of the IUCD [2,3]. The most common presentation would be abdominal pain, chronic pelvic pain, abnormal vaginal or rectal bleeding, irritative lower urinary tract symptoms, bowel or bladder perforation, peritonitis, unwanted pregnancy, intestinal obstruction, abscess or fistula formation depending on the organ of penetration and the interval from the time of penetration and patient's response [4-6]. This case report highlights a case of misplaced Copper T as an atypical presentation of an abdominal wall lump.

Case Presentation:
A 35-year-old female presented with a progressively enlarging lump in the right infra umbilical region, measuring 3x2 cm, firm in consistency, and non-mobile. She had been experiencing pain for nine months. Her medical history included the insertion of a copper IUD (Copper T) five years prior. An abdomen ultrasound revealed a well-defined cystic lesion in the muscle plane of the right infra umbilical region with a hypoechoic component and a linear foreign body at the margin. MRI of the abdomen showed an ill-defined lesion measuring 2.6x1.7 cm within the anterior abdominal wall, deep to the right rectus abdominis muscle, with a thick cystic component measuring 1.5x1.1 cm. The linear echogenic component was identified as a misplaced Copper T IUD. Surgical intervention was necessary to remove the displaced IUD. A multidisciplinary team, including Gynecologists and General surgeons, collaborated on the procedure. A small incision was made over the lump, and careful dissection of the tissue layers was performed. The IUD was embedded in the rectus muscle, surrounded by omentum, and forming a cyst filled with pus (figure). The device and the wrapped omentum were removed, and the tissues were repaired.

Histopathological examination of the excised specimen revealed denuded epithelium from the abdominal wall, with the dermis showing adipocytes and muscle tissue infiltrated by dense diffuse inflammation. This inflammation consisted of lymphocytes, plasma cells, histiocytes, occasional giant cells, congested blood vessels, and foamy macrophages, indicating chronic inflammation due to the Copper T IUD. The postoperative period was uneventful, and the patient was discharged satisfactorily.

2. DISCUSSION:

One of the most serious complications associated with IUCDs is uterine perforation. Many women with a perforated or translocated IUCD serve to be asymptomatic with over 30% of the perforations recognized at the time of pregnancy. An intraperitoneal IUCD can remain undetected if the patient remains asymptomatic, however, a symptomatic translocated IUCD is usually removed to relieve abdominal pain and bleeding [7]. Studies have shown the translocation of IUCD occurs more in women who undergo labor with IUCD in situ. The hypoestrogenic state during the puerperal period causes thinning of the uterus and a reduction in the size of the uterus making it more vulnerable for translocation [8]. Its has also been dated that 15% of the perforated IUCD causes injury to the bowel primarily involving the sigmoid colon followed by the small intestine and the rectum. It can also be partially or completely embedded in the bowel wall [9]. Laparoscopy is advised over laparotomy because of its safe and minimally invasive techniques [10].

3. CONCLUSION:

IUCD is generally a safe and long contraception. Uterine perforation is one of the most serious uncommon complications. The chronic inflammatory reaction with the gradual erosion of the uterine wall proves to be the main factor behind the perforation that can be complete with the device totally in the abdominal cavity/ wall, or partially with the device within the uterine wall [11]. This case highlights the importance of considering unusual etiologies in the differential diagnosis of abdominal wall lumps. Clinicians should maintain a high index of suspicion for migrated intrauterine devices, even in the absence of gynecological symptoms. Timely and accurate diagnosis is crucial for appropriate management and ensuring positive patient outcomes.

LEGENDS

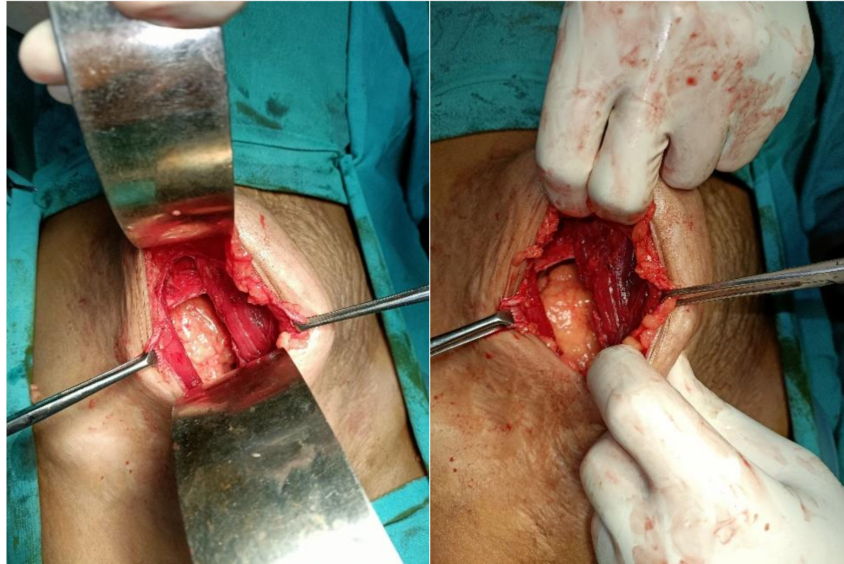

Figure : IUCD in the rectus muscle, surrounded by omentum

4. REFERRENCES

1. Farouk K, Uddin Afridi Z, Farooq MA, Qureshi IA. Urological complications of intrauterine contraceptive device. Journal of Postgraduate Medical Institute. 2007;21(4).
2. Bhatnagars MI. A Field Study of IUCD Acceptors inthe State of UP. New Delhi: National Institute of Health and Family Welfare; 1988.
3. Schaap B. IUD acceptance in rural madhya-pradesh-results of an acceptors interview. Journal of Family Welfare. 1993;39(1):52-5.
4. Kho KA, Chamsy DJ. Perforated intraperitoneal intrauterine contraceptive devices: diagnosis, management, and clinical outcomes. J Minim Invasive Gynecol. 2014;21(4):596-601.
5. Huertas-Velasco MA, Gómez-Rubio M, "Endoscopic removal of intrauterine device penetrated through the rectal wall," Revista Espanola de EnfermedadesDigestivas, 2012; 104 (8): 432–433.
6. Shin DG, Kim TN, Lee W. "Intrauterine device embedded into the bladder wall with stone formation: laparoscopic removal is a minimally invasive alternative to open surgery," International Urogynecology Journal, 2012;23(8):1129–1131.
7. Caliskan E, Ozturk N, Dilbaz BO, Dilbaz S. Analysis of risk factors associated with uterine perforation by intrauterine devices. Eur J ContraceptReprod Health Care2003; 8(3):150-155.
8. Weerasekera A, Wijesinghe P, Nugaduwa N. Sigmoid colocolic fistula caused by intrauterine device migration: a case report. J Med Case Rep. 2014; 8:81.
9. Arslan A, Kanat-Pektas M, Yesilyurt H. Bilge U. Colon penetration by a copper-intrauterine device: a case report with literature review. Arch Gynecol Obstet.2009; 279(3):395-397.
10. MosleyFR, ShahiN,KurerMA, "Elective surgical removal of migrated intrauterine contraceptive devices from within the peritoneal cavity: a comparison between open and laparoscopic removal," Journal of the Society of Laparoendoscopic Surgeons, 2012;16(2): 236–241

11. Zakin D, Stern WZ, Rosenblatt R. Complete and partial uterine perforation and embeddingfollowing insertion of intrauterine devices. I. Classification, complications, mechanism, incidence, and missing string.Obstet Gynecol Surv.1981;36:335–353.