

Unpredictable Obstetrics- Ectopic Pregnancy or Blighted Ovum..... No It's Bilateral Para Ovarian Cysts

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Abstract: We certify that there is no conflict of interest with any financial organization regarding the material discussed in the manuscript. This case is being reported after taking the written informed consent of patient and there is no ethical issues related to it. We are not having any financial funding source.

Introduction: Para ovarian cysts are found in the broad ligament between the ovary and the fallopian tube. They may be non-neoplastic simple cysts or cysts of neoplastic origin. Most of the time they are asymptomatic, generally present symptoms due to their complications. Complications of para ovarian cysts include torsion, rupture, infection and rarely malignancy. Diagnosis is confirmed on histopathology.

Case repo: A 20 yrs old presented with acute abdomen, amenorrhea and spotting. On laboratory investigations, urine pregnancy test was positive while other blood and biochemical para meters were with in normal limit. Emergency laparotomy performed to confirm the provisional diagnosis of ectopic pregnancy. On laparotomy bilateral para ovarian cysts were seen with normal tubes and ovaries on both sides. Diagnosis of para ovarian cyst was confirmed on histopathology.

Discussion: Para ovarian cysts represent only 10% of adnexal masses. They are more common in childbearing women, mostly in 30-40yrs age group. Paratubal (para ovarian) cysts may arise from embryonic remnants like Müllerian or Wolffian structures and are common in adult females. These cysts are usually symptom free but they may present with pelvic pain, dyspareunia. Para ovarian cysts are although rare but their complications due to torsion, internal hemorrhage and rupture of large sized cysts are seen similar to ovarian cysts and difficult to differentiate them both clinically as well as radiological imaging. Malignant neoplasms arising from para ovarian cysts are very rare.

Conclusion: Para ovarian cysts are rare and most of the time asymptomatic. But it should be considered as the differential diagnosis of acute pain abdomen in females especially in women of child bearing age group.

Key words: - Paratubal, Embryonic remnants, Paramesonephric duct, Cystic, Neoplastic

I. Introduction

With advancement of laboratory investigations and radiological imaging, obstetrical morbidity and mortality have decreased but still obstetrics is very much unpredictable. Para ovarian cysts are found in the broad ligament between the ovary and the fallopian tube. They may be either non neoplastic simple cysts or cysts of neoplastic origin. The simple para ovarian cysts originate from the embryonic remnants of the urogenital system which are the mesonephric and paramesonephric ducts, or from the invagination of the serosa of fallopian tubes resulting in a mesothelial cyst. Most of the time they are asymptomatic, generally present symptoms due to their complications. Complications of para ovarian cysts include torsion, rupture, infection and rarely malignancy [1]. Diagnosis is confirmed on histopathology by the presence of smooth muscle in the cyst [1].

II. Case report

A 20 yr. - old female came to outpatient department of hospital with 2 months amenorrhea. A urine pregnancy test was done which was positive. Laboratory investigations including blood grouping, hemoglobin, total leukocyte count and routine urine examination along with ultrasonography was advised. But she again came next early morning with acute pain abdomen and mild vaginal bleeding. On physical examination, her vital signs were found normal. However tenderness was found all over the abdomen. Laboratory investigations were within normal limit. Therefor ultrasound was requested. The ultrasound report showed considerable amount of fluid with internal echoes in pouch of Douglas and gravid uterus with gestational sac without fetal pole with poor decidual reaction, suggestive of ectopic pregnancy or blighted ovum (Fig. 1.1).

To arrive at a definitive diagnosis, emergency laparotomy was planned. On laparotomy, bilateral cystic structures were seen in broad ligament. However, the fallopian tubes and ovaries were normal on both sides, so cystectomy was done (Fig. 1.2).she expelled the product of conception spontaneously after which check curettage was done.

On gross examination, right cyst was 5 × 4 cm while left 2 × 2 cm containing clear to yellow colored fluid. Histopathology showed ciliated, columnar cells with under few chronic inflammatory cells.

III. Discussion

Para ovarian cysts represent only 10% of adnexal masses. They are mostly found in childbearing age group women, mostly in 30-40yrs age group. Paratubal (para ovarian) cysts arise from Müllerian duct or Wolffian duct remnants and are common in adult females of reproductive age group. Para ovarian cysts have variation in their origin, most of them originate from mesothelial covering of the peritoneum (68%), and embryological remnants like paramesonephric duct (müllerian duct) remnants (30%) or mesonephric duct (Wolffian duct) remnants (2%) [2]. These cysts are sensitive to hormone and most of them are asymptomatic. These cysts are usually symptom free but they may present with pelvic pain, dyspareunia [2]. Preoperative diagnosis of para ovarian cysts are very difficult and rare and their true nature are identified at laparotomy. Rarely, they can be associated with torsion of fallopian tubes [3]. They may cause other complications like infections, hemorrhage, rupture, and abdominal pain. Malignant neoplasms arising from para ovarian cysts are very rare [3]. Para ovarian tumor of borderline malignancy is rare [4]. Most of the time they are too small to cause any symptom, although rare, occasionally large cyst, resulting in pelvic pain. Para ovarian cysts are although rare but their complications due to torsion, internal hemorrhage and rupture of large sized cysts are seen similar to ovarian cysts and difficult to differentiate. Usually they are thin walled and unilocular hence, it is difficult to differentiate it from ovarian cyst on imaging. Para ovarian cysts are usually seen unilocular, thin walled and anechoic on CT scan. Rarely, these cysts may show internal echoes and thin septations. Features suggestive of malignant transformations such as thick septations, papillary projections, or mural nodules, or are rarely seen. Visualization of a normal ipsilateral ovary close to the cyst but separate from the cyst is an important MR finding. Para ovarian cysts are rarely diagnosed by radiologists. Para ovarian cysts are important differential diagnosis of acute abdomen in females especially in child bearing age group. Para ovarian cysts are mostly unilateral, but bilateral cysts have been also reported. Complications of para ovarian cysts especially torsion are usually seen in the reproductive age group especially in women having tubal ligation by Pomeroy method. Torsion of para ovarian cysts are more common in pregnant women likely to be due to rapid growth spurt in pregnancy. Usually they are of benign origin. Neoplastic para ovarian cysts are rare incidence. Both open surgery and laparoscopy is equally preferred. In most of the cases true nature of cysts origin is confirmed only after histopathological examination

IV. Conclusion

Para ovarian cysts are rare and asymptomatic but may present with complications like torsion, hemorrhage, infections. It is very difficult to differentiate them from ovarian cysts clinically as well as radiologically. They are important differential diagnosis in females of child bearing age group, with acute pain abdomen and should be considered. Para ovarian cysts are difficult to diagnose preoperatively, and even by transvaginal ultrasound too. All symptomatic and large para ovarian cysts should be removed and diagnosis must be confirmed by histopathology.

References

- [1]. Thakore SS, Chun MJ, Fitzpatrick K (2012). "Recurrent ovarian torsion due to paratubal cysts in an adolescent female". *J Pediatr Adolesc Gynecol* 25 (4): 85–7.
- [2]. Kandil M, Sayyed T, Zakaria M. (2013) Laparoscopic trocar management of a giant paraovarian cyst: a case report
- [3]. Kisku S, Thomas RJ. An uncommon twist: isolated fallopian tube torsion in an adolescence. *Case Rep Surg*. 2013;509424.
- [4]. Suzuki S, Furukawa H, Kyozuka H, Watanabe T, Takahashi H, Fujimori K (2013). "Two cases of paraovarian tumor of borderline malignancy". *J Obstet Gynaecol Res* 39: 437–41.

Figures



Fig. 1.1 ultrasound showing considerable amount of free fluid with internal echoes in pouch of Douglas with an intrauterine gestational sac without fetal pole.



Fig. 1.2 intra operative view of para ovarian cyst.