

Gartner's Cyst During Pregnancy Presenting As Acute Emergency : A Case Report

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Abstract: Gartner's duct cysts are remnants of Wolffian duct usually located in the anterolateral wall of vagina and may be associated with renal and ureteral anomalies. This is a case report of a 19 year old primi at 25 weeks of gestation presented to the casualty with complaints of abdominal pain. Ultrasonogram revealed an ovarian cyst which was proceeded to emergency laparotomy since torsion ovarian cyst was suspected. A large left paraovarian cyst, filled with clear fluid, unilocular seen which was excised and the histopathology was reported as mesonephric cyst.

Date of Submission: 03-05-2018

Date of acceptance: 18-05-2018

I Introduction

During the development of embryo, Wolffian duct otherwise called as Mesonephric duct form the male internal urogenital system and the Mullerian duct (Paramesonephric duct) form female internal urogenital system. The fetus is bisexual i.e both the systems will be present till 7 weeks of gestation. Thereafter, depending upon the genetic sex of the fetus (presence of absence of Y chromosome), one system dominates and other system regresses. The presence of Y chromosome with result in the regression of Paramesonephric duct which its absence results in the regression of Mesonephric duct.

Normally, in females (46 + XX) at around 8th week of gestation, the two Paramesonephric ducts fuse distally to form uterus, cervix and upper vagina and on the other hand, the Wolffian duct regresses. However, persistence of Wolffian duct in vestigial form can lead to the formation of Gartner's cyst. It is commonly located in the right anterolateral wall of vagina and presenting as anterior vaginal wall cyst. Also, it is confused with Bartholin cyst which is the first differential diagnosis of anterior vaginal wall cyst. Other differential diagnosis to be considered are cystocele, ureteric prolapse, urethral diverticulum and any malignant growth of anterior vaginal wall.

II Case Report:

19 Years of primigravida, booked and immunized elsewhere, spontaneous conception, regular periods, sure of dates reported to the casualty of Pollachi District Headquarters Hospital at 25 completed weeks of gestation with complains of diffuse lower abdominal pain, dull aching in nature, not relieved by analgesics for 3 days duration. Her antenatal visits were uneventful and her dating scan performed at 9 weeks of gestation showed a left ovarian simple cyst measuring 8x7 cm.

On examination, her general condition was good except for anaemia and tachycardia. Uterus corresponded to the period of gestation, not tense or tender, Fetal heart rate was good and there was vague, diffuse lower abdominal tenderness more over the left side. Hence, emergency ultrasonogram was performed which showed a large left ovarian simple cyst of 17x16 cm abutting the uterus towards the right side. The cyst was probably ovarian in origin and there was no evidence of torsion. In view of persistent abdominal pain and large size of the cyst, emergency laparotomy was performed after informed written consent of the patient and progesterone depot intramuscular to prevent preterm labor. As the patient presented to the casualty, with acute abdominal pain, patient could not be investigated further with MRI scan.

Surgery was planned in spinal anaesthesia, abdomen opened through suprapubic transverse incision. Uterus was enlarged to 26 week size and bilateral tubes and ovaries normal. Left side cyst could not be accessed and hence incision extended. A clear cyst was noted in the paraovarian region measuring about 19x18 cm extending from the left adnexa to the midline. The walls of the cyst dissected gently and as the apex of the cyst was difficult to approach, cyst was decompressed and cyst was excised from the surrounding structures (Figure 1). Cyst fluid was clear, cyst was smooth, regular, no septations, no solid areas, no papillary excrescences. The fluid and the cyst wall was sent for cytology, biochemical analysis and histopathology. Post operative period was uneventful and patient discharged on the 5th post operative day.

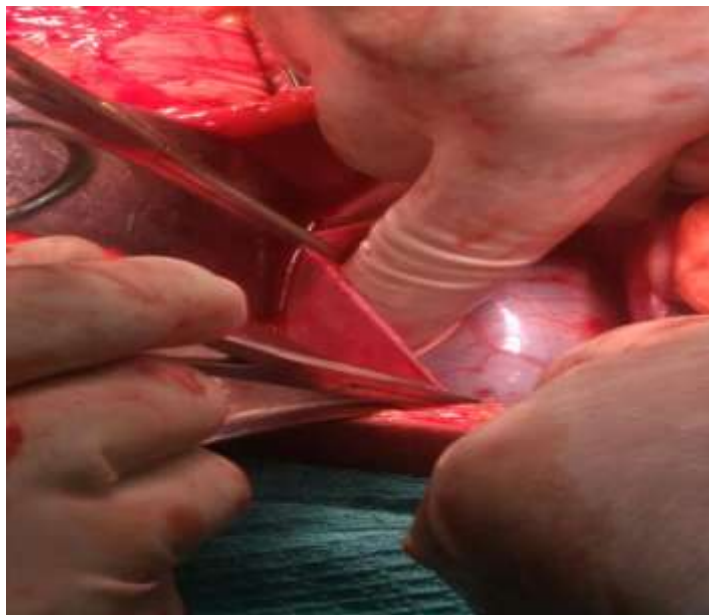


Figure 1. Dissection of the cyst from the surrounding tissues.

Histopathological examinations showed that cyst wall was composed of fibrocollagenous tissue lined by cuboidal to columnar epithelium without atypia which was consistent with mesonephric cyst. There is no evidence of malignancy. Biochemistry showed that the fluid is a transudate.

III Discussion

Gartner's duct is considered to be the remnant of vaginal portion of Wolffian duct in females. The secretion of the cuboidal glandular epithelium might result in cystic dilatation of the duct presenting as Gartner's duct cyst or Mesonephric cyst. Mesonephric cysts are rarely reported and incidental finding in MRI is around 1-2% (1). The largest one measuring about 20x13cms has been recorded in literature (2). There are approximately only 100 cases reported so far in literature. This case has been presented owing to the large size and unusual presentation. They are usually small, solitary, unilateral and asymptomatic presenting as vaginal wall cysts. Similar to this case, previous researchers also had documented an increase in size during pregnancy which might be attributed to the increased vulvar blood flow (3). The presence of renal anomalies associated with such cysts has been emphasized in literature. Also, malignant transformation although rare, has been mentioned in a case report where adenocarcinoma was identified in vaginal mullerian cyst in a 48year old perimenopausal woman (4). Hence, followup is essential in suspicious cases. Although it is a vestigial remnant commonly seen in broad ligament or lateral to uterus and vagina, it may sometimes land up in emergencies such as torsion.

IV Conclusion

To conclude, in case of abdomino-pelvic cysts during pregnancy, Gartner's duct could also be a possibility and hence pre operative assessment with MRI imaging could ease the surgical procedure.

References

- [1]. Eilber KS., Raz s., Benign cystic lesions of the vagina: a literature review. *J Urol.* 2003;170(3):717-22
- [2]. Pushpalatha K., Mishra P., Deep bag , "An unprecedented large mesonephric cyst posing diagnostic dilemma and surgical challenge" *Int J Reprod Contracept Obstet Gynecol.* 2015 Jun;4(3):905-7
- [3]. Kaufman RH., Cystic tumors En: Kaufman R.H. and Farso S. *Benign diseases of the vulva and vagina* 4th ed. St. Louis: Mosby Year Book; 1994:168-248.
- [4]. Lee KS., Park KH/, Lee S., KinJU, Seo SS. Adenocarcinoma arising in a vaginal Mullerian cyst: a case report. *Gynecol Oncol.* 2005;99:767-9

Dr. Jananeelangovan D.G.O " Gartner's Cyst During Pregnancy Presenting As Acute Emergency : A Case Report. "IOSR Journal of Dental and Medical Sciences (IOSR-JDMS), vol. 17, no. 5, 2018, pp 25-26.