



ORIGINAL RESEARCH PAPER

Obstetrics & Gynaecology

A CASE REPORT ON LARGE OVARIAN LUTEAL CYST

KEY WORDS:

Dr Ani Chandanan

Associate Professor, Tsm Medical College, Anora, UP

Dr Rachita Nigam

Assistant Professor, Tsm Medical College, Anora, UP

Dr Mamta Arora

Assistant Professor, Tsm Medical College, Anora, UP

INTRODUCTION-

corpus luteum cyst is a type of ovarian cyst which may rupture about the time of menstruation, and take up to three months to disappear entirely. A corpus luteum cyst rarely occurs in women over the age of 50, because eggs are no longer being released after menopause. Corpus luteum cysts may contain blood and other fluids. Corpus luteum cysts are a normal part of the menstrual cycle. They can, however, grow to almost 10 cm (4 inches) in diameter and have the potential to bleed into themselves or twist the ovary, causing pelvic or abdominal pain. It is possible the cyst may rupture, causing internal bleeding and pain. This pain typically disappears within a few days of the rupture. If the corpus luteum becomes large it may cause ovarian torsion, where the ovary twist and blood flow is cut off. Ovarian torsion is rare and accompanied by severe pain. This type of functional cyst occurs after an egg has been released from a follicle. The follicle then becomes a secretory gland that is known as the corpus luteum. The ruptured follicle begins producing large quantities of estrogen and progesterone in preparation for conception. If a pregnancy doesn't occur, the corpus luteum usually breaks down and disappears. It may, however, fill with fluid or blood, causing the corpus luteum to expand into a cyst, and stay in the ovary. Usually, this cyst is on only one side, and does not produce any symptoms.^{[1][2]}

In women of reproductive age cysts with a diameter of less than 5 cm are common, clinically inconsequential, and almost always a physiological condition rather than a cancer or other disease condition.^[3] In postmenopausal women the threshold for concern is 1 cm.^[3] Although ovarian cancer may be cystic, it does not arise from benign corpus luteum cysts.^[3] Medical specialty professional organizations recommend no follow-up imaging for cysts which are considered clinically inconsequential.^[3]

A ruptured corpus luteum can cause hemoperitoneum with abdominal pain, and is a common condition in women of reproductive age. It may be confused with ectopic pregnancy.^[4] ary twists and blood flow is cut off. Ovarian torsion is rare and is accompanied by severe pain.

Case Report-

A 27 yr old female resident of fatehpur (UP) admitted to TSM Medical college in emergency on 15/2/2022 with complain of pain abdomen and vomiting. According to patient, pain was started 3 month back which was located in lower abdomen associated with vomiting. Patient was also given history of lump in lower abdomen.

She had one live issue. Patient firstly visited some local practitioner in fatehpur where she advised USG whole abdomen and pelvis. The report of USG shows large right multiseptate ovarian cyst. Patient went to Kanpur where non contrast MRI for whole abdomen done, the report for the same suggest right ovary appear bulky measuring ~ 6.2 x 8.3 x 6.5 mm (volume ~ 77) with thick walled multi-cystic lesion seen in

right ovary and minimal adjacent fat stranding seen - Benign in nature? Cystadenoma. Patient was also advised marker for ovarian tumor (Alfa-Fetoprotein, CA 19.9, Human Chorionic Gonadotropin and S. CEA, S. CA 125) and report for all ovarian marker comes out within normal limit. On 15 of feb 2022 patient came to emergency in TSM Medical college.

On per abdominal examination, an abdominal lump felt on lower abdomen which was soft, smooth and nontender. On per speculum examination, cervix was unhealthy, hypertrophy and thick white discharge present. On per vaginal examination, a large mass of around 10x8x6 cm felt separately from uterus on right adnexa. Mass was tender, smooth.

All preanaesthetic investigation was sent and preanaesthetic examination of patient done and patient kept for Exploratory laparotomy.

On 17 feb 2022, Exploratory laparotomy done, Intraop finding torsion of ovarian cyst seen, detorsion done in opposite direction, a ovarian mass of ~ 10x8x6 cm seen, clamped cut and ligated. Ovarian mass and ascitic fluid sent for histopathology. Post op period of patient was uneventful and she was discharged on 22 feb 2022.

Patient came for follow up on 2 march 2022, she was advised oral contraception for 6 month and her Histopathological report shown ovarian cyst (Right) - Luteal cyst.

Table 1

OVARIAN MARKER NAME	RESULT	UNIT	REFERENCE RANGE
AFP	3.57	ng/ml	0.0-8.5
CA19-9	29.7	u/ml	0.0-37.5
HCG	< 1.2	miu/ml	<5
S. CEA	1.39	ng/ml	Smoker 0-5 Non smoker 0-3
LDH	250	U/L	140-280
CA 125	12.1	u/ml	0-35

REFERENCES:

1. "Ovarian Cysts: What You Need to Know about an Ovarian Cyst and PCOS".
2. "Corpus luteum cyst". Uni. Utah: Knowledge Weavers: Human Reproduction.
3. "Corpus luteum cyst". Uni. Utah: Knowledge Weavers: Human Reproduction American College of Radiology, "Five Things Physicians and Patients Should Question" (PDF), Choosing Wisely: an initiative of the ABIM Foundation, American College of Radiology, archived from the original (PDF) on April 16, 2012, retrieved August 17, 2012, citing
 - Levine, D.; Brown, D. L.; Andreotti, R. F.; Benacerraf, B.; Benson, C. B.; Brewster, W. R.; Coleman, B.; Depriest, P.; Doubilet, P. M.; Goldstein, S. R.; Hamper, U. M.; Hecht, J. L.; Horowitz, M.; Hur, H. -C.; Marnach, M.; Patel, M. D.; Platt, L. D.; Puscheck, E.; Smith-Bindman, R. (2010). "Management of Asymptomatic Ovarian and Other Adnexal Cysts Imaged at US: Society of Radiologists in Ultrasound Consensus Conference Statement" (PDF). *Radiology*. **256** (3): 943-954. doi:10.1148/radiol.10100213. PMC 6939954. PMID 20505067. S2CID 10270209. Archived from the original (PDF) on 2019-12-30.
 - o American College of Obstetricians and Gynecologists (2002). "ACOG Committee Opinion: Number 280, December 2002. The role of the generalist obstetrician-gynecologist in the early detection of ovarian cancer". *Obstetrics*

- and Gynecology. **100** (6): 1413–1416. doi:10.1016/S0029-7844(02)02630-3. PMID 12468197.
- o American College of Obstetricians Gynecologists (2007). "ACOG Practice Bulletin No. 83: Management of Adnexal Masses". *Obstetrics & Gynecology*. **110** (1): 201–214. doi:10.1097/01.AOG.0000263913.92942.40. PMID 17601923.
 - o Timmerman, D.; Valentin, L.; Bourne, T. H.; Collins, W. P.; Verrelst, H.; Vergote, I.; International Ovarian Tumor Analysis (IOTA) Group (2000). "Terms, definitions and measurements to describe the sonographic features of adnexal tumors: A consensus opinion from the International Ovarian Tumor Analysis (IOTA) group". *Ultrasound in Obstetrics and Gynecology*. **16** (5): 500–505. doi:10.1046/j.1469-0705.2000.00287.x. PMID 11169340. S2CID 7553390.
 - 4 Bauman, Renato; Horvat, Gordana (December 2018). "MANAGEMENT OF RUPTURED CORPUS LUTEUM WITH HEMOPERITONEUM IN EARLY PREGNANCY – A CASE REPORT". *Acta Clinica Croatica*. **57** (4): 785–788. doi:10.20471/acc.2018.57.04.24.PMC 6544092. PMID 31168219.