



A HUGE SEROUS CYST ADENOMA: A POSTMENOPAUSAL SURPRISE AS MASSIVE ASCITES!

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ABSTRACT Ovarian cystadenomas are neoplastic tumors arising from the ovarian surface epithelium. It occurs mainly in individuals of reproductive age. However, it has been reported in adolescent and postmenopausal age groups. Huge ovarian tumors are rare nowadays due to access to imaging modality. Here, we report a case of huge serous cyst adenoma in postmenopausal age referred as massive ascites with a comprehensive approach to diagnosis and management. We also underscore the need for routine annual ultrasound in a woman for timely diagnosis of pathology in peri-menopausal and post-menopausal age group.

KEYWORDS : Ovarian Cyst, Serous Cyst Adenoma, Postmenopausal, Abdominopelvic Mass

INTRODUCTION

India is a developing country where health care facilities are free in the public sector, but routine health checks are not performed due to various reasons. The private sector is known for monetary challenges for annual health surveillance. Hence, when a routine health surveillance system is not followed holistically, certain conditions are diagnosed only after symptoms appear. Ovarian tumors are one among these conditions which remain asymptomatic in early stages and get attention only after reaching to enormous size. Here, we present a case of huge serous cyst adenoma in a postmenopausal patient referred to as massive ascites.

Case Report

Mrs. X, 55 years old, P2L2, sterilized postmenopausal for 4 years, referred to tertiary center as a case of massive ascites for further evaluation. History suggested pain in the right hypogastrium on and off for 6 months. The pain was insidious in onset, mild dull aching, and radiating to the back without any aggravating or relieving factors. A history of weight loss (4 kg) was present. There was more abdominal pain for the past two weeks, with bloating and vomiting. Her appetite was reduced but bowel, and bladder function were normal. No dyspnea, palpitation or swelling of the legs was noted. She didn't have any other medical illness. Her vital parameters were within normal limits and weight was 78kgs. Upon examination, the abdomen was uniformly distended, till xiphisternum (34week pregnant uterus size) with full flanks. The abdominal examination was soft, cystic and non-tender. Dull percussion notes were elicited over the entire abdomen with fluid thrill. The speculum examination was unremarkable, and bimanual examination suggested a left deviated cervix and obliterated vaginal fornixes. Other systems were unremarkable.

Investigations

USG of the abdomen suggested an abdominopelvic cystic lesion extending from the pelvis to the epigastrium with clear fluid, and thin septation likely of ovarian origin. Uterus was postmenopausal size and thin (2 mm) endometrium. Ovaries were difficult to opine. Her blood investigations revealed CA-125 (90 U/ml), CA 19-9 and CEA levels were normal. Other hematological tests were unremarkable. Her CT scan (Fig. 1a, b, c) revealed a unilocular cystic mass of the 32x27x17 cm on the right side, displacing the liver and bowel loops cranially, likely representing a benign ovarian cystadenoma. The left ovary was 5x4x3.5 cm in size, with the cyst measuring 3x2.3 cm. The appendix was inflamed; both the kidneys and other abdominal organs were normal without peritoneal thickening or free fluid. The lymph nodes and vascularity were unremarkable. Her RMI 1 score was more than 250 and IOTA assessment was inconclusive.

Treatment: Staging laparotomy with total abdominal hysterectomy and bilateral salpingo-oophorectomy was performed after thorough counselling and consent. Midline vertical incision and principles of the suspected malignancy procedure were followed. Intraoperative findings suggested a huge uniloculated cystic mass occupying the entire abdomen originating from left adnexa. Right ovary had cyst measuring 3x3 cm with normal uterus. Peritoneal saline wash was negative for malignant cells. The Frozen section reported benign

surface epithelial neoplasm, probably serous cyst adenoma. Her postoperative period was uneventful and was discharged on 5th post operative day.

The histopathology report suggested serous cyst adenoma of the left ovary, weighing 10.6 kg (Figure 2), tall ciliated columnar epithelium and focal epithelial stratification of <1%. The right ovary was enlarged with serous cyst adenoma having papillary excrescences (<4 in number). Histopathological examination uterus was unremarkable.

DISCUSSION

Ovarian masses are known for their silent nature in early stage, and symptoms are developed only after substantial growth of the tumor. Consequently, delay in diagnosis is the norm. In a postmenopausal patient, the ovaries remain active following menopause for variable duration. Hence, it is not uncommon to find ovarian tumors following menopause(1). The most common ovarian tumor is epithelial ovarian tumor (EOT), and among EOTs, 10% of serous cystadenoma are involving both ovaries.(2) The present case also reports serous cyst adenoma in both ovaries, wherein right ovary had huge serous cyst adenoma of 34x27x17m and left ovarian serous cyst adenoma of 3x2.3 cm.

EOTs begin as an epithelial inclusion cyst, which itself often derives from the fallopian tube and is further sub-grouped into serous, mucinous, clear, and endometrioid tumors etc. Almost 70% of serous tumors are benign, 5–10% are borderline tumors, and 20–25% have malignant potential.(2,3) Benign serous tumors include cystadenomas, adenofibromas, cyst adenofibromas and surface papilloma. Serous tumors can arise from ectopic ovarian tissue and from organs such as the pancreas and mesentery.

A large ovarian mass is challenging when it is diagnosed at an early age(4) or during the postmenopausal period. Its asymptomatic nature prevents timely diagnosis. Large and giant ovarian tumors have been reported throughout literature worldwide. Our patient was completely unaware of the mass due to relatively subtle symptoms for more than 5 months. There might be socio-cultural barriers or medical-surgical fear, which would have delayed her presentation to health care facilities. Early symptoms are generally abdominal distension and vague abdominal symptoms such as nausea, vomiting and later bloating, abdominal pain, etc. These symptoms are progressive usually and may pose challenge to the general physician due to nonspecific signs and symptoms and hence, prone for misdiagnosis.(5) Large tumors can even lead to cardiorespiratory embarrassment and other pressure symptoms like frequent micturition, constipation, early satiety etc. Enormous cysts are at higher risk of rupture, obstruction to nearby structures, bleeding and, occasionally, infection and partial torsion.

USG of the abdomen and transvaginal scanning has crucial role in diagnosis and differentiating benign masses from malignant masses. The majority of serous cyst are unilocular, although they can be multilocular. They are filled with serous fluid (hypochoic mainly on scan) but sometimes with tiny particles (echogenic area on scan).

Septae within the cyst and papillary projections are generally not found(6). Higher imaging is essential for huge tumors and tumors with suspicion of malignancy for further characterization. The tumor marker and risk of malignancy index (RMI) can be used to develop an evaluation protocol. A higher score of more than 250 RMI requires tumor evaluation through higher imaging modality and referral to specialized center.(2, 7) International ovarian tumor analysis (IOTA) and various other analytic system are developed for exact characterization of mass. (8)

Multiple differential diagnosis can be considered after physical examination, which includes cyst arising from mesentery, ascites, encysted peritoneal inclusion cyst, and other cystic masses arising from various abdominal and pelvic structures etc. for huge ovarian masses.

Patient management depends on patient age, the size of the tumor, suspicion of malignancy and further histopathology results (frozen section)(9, 10). Here, we selected staging laparotomy which is gold standard for management of huge ovarian tumors. Because of its large size, high RMI, and the postmenopausal period, we opted for intact removal of tumor. The ovarian malignancy protocol was followed during surgery.

CONCLUSION

All postmenopausal women should undergo periodic health checks to detect benign or malignant abnormalities at earliest. It is crucial to perform health checks annually via ultrasound to diagnose silent conditions such as ovarian masses. Higher imaging is a cornerstone for the exact diagnosis. Regular surveillance of ovarian cysts is crucial for timely intervention in patients with ovarian masses to reduce anxiety and morbidity.

Learning Points

1. Benign ovarian mass can go unnoticed for years and often detected late. Hence, High degree of suspicion in patients with gastric symptoms and routine ultrasound periodically is suggested.
2. Ultrasound and MRI/CT scans are cornerstone as a detection modality for silent ovarian masses.
3. Facility of frozen section in doubtful benign category helps to provide optimum care.
4. Routine health check facility in all age groups, and particularly in postmenopausal woman is crucial for early detection of Gynecological conditions.

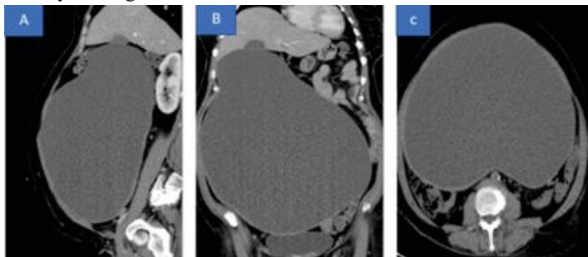


Figure 1: CT Scan Depicting the Ovarian Tumor in the Sagittal a), Coronal b) and Axial Images c).

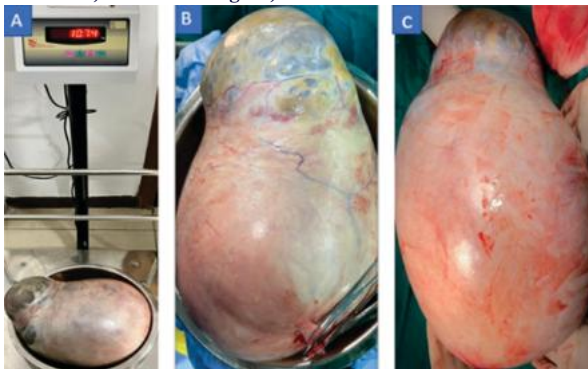


Figure 2: Ovarian Mass with Weight a), Postoperative Ovarian Mass b), Preoperative Ovarian Tumor

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Case reports provide a valuable learning resource for the scientific community and can indicate areas of interest for future research. They should not be used in isolation to guide treatment choices or public health policy.

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