

Giant Ovarian Cyst: A Case Report

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Abstract

Cystic abdominal tumors are extremely common. Now a day they are diagnosed more frequently and much earlier due to availability of better imaging modalities. Presentation of large ovarian cysts has become rare as most of them are diagnosed and treated early. Still we get reports of patients with large/giant benign abdominal cysts and many of them are serous cyst adenoma of ovary. Mucinous cyst adenomas (MCAs) of the ovary are known for their potential to grow to massive proportions and are often incidentally diagnosed. They are typically benign tumors accounting for 15% of ovarian neoplasm's and up to 80% of all mucinous tumors. Sometimes, it becomes very difficult to identify the source of these cysts and are misdiagnosed as mesenteric cyst. Final diagnosis is only possible at laparotomy. Here we report a case of Giant ovarian cysts in an octogenarian female, weighing 27 kgs.

Key Words

Ovarian Cyst, Giant, Mucinous Cyst Adenoma, Laparoscopic Management, Ascities

Introduction

Cystic abdominal tumors are extremely common and now they are diagnosed more frequently and earlier due to availability of better imaging modalities. Now a days ovarian cysts rarely grow immense due to the fact that ultrasonography scanning permits early detection and appropriate treatment. Occasionally, ovarian cysts reach enormous dimensions without raising any symptom. A few cases of giant ovarian cysts have been sporadically reported in the literature. (1-3)

Furthermore, Mucinous cyst adenomas (MCAs) of the ovary are known for their potential to grow to massive proportions and are often incidentally diagnosed. They are typically benign tumors accounting for 15% of ovarian neoplasms and up to 80% of all mucinous tumors.(4) Ovarian MCAs are characteristically unilateral, only 5% presenting bilaterally, and the peak incidence occurs among women who are between 30 and 50 years of age.(5) MCA appears as a large cystic mass, often multiloculated, containing sticky gelatinous fluid. The vast majority of mucinous tumors are benign (75%), 10% borderline, and 15% carcinomas. (6) Management of ovarian cysts depends on the patient's age, the size and structure of the cyst and menopausal status. Surgical management of cysts is by open or laparoscopic cyst excision or cystectomy with oophorectomy. (7,8) We

present here a case of Giant Ovarian cyst in an octogenarian female, that turned out to be benign mucinous cyst adenoma of the ovary on histopathological examination.

Case Report

85 years old female presented with the history of progressively increasing abdominal contour for last 03 months. Patient used to experience mild to moderate diffuse pain abdomen, without any special character. Abdominal examination revealed a uniformly large cystic mass extending from pubis to epigastrium. There was uniform fullness in both the flanks. All other relevant investigations for GA were within normal limits. Ultrasound report could not pick the ovarian cyst, it suggested features of ascities. revealed a large swelling about 45 cm by 32 cm in cranio-caudal dimension arising from pelvis and extending right up to both hemi-diaphragms, with fluid density. CECT suggested of an ovarian mass repelling the rest of the intraperitoneal organs. Right ovary and uterus revealed no abnormality. There was a large mass of 58 cm by 46 cm in cranio-caudal direction arising from the pelvis. In view of large cystic mass laparotomy was planned. Abdomen was opened with infraumbilical midline incision. Large cyst mass was seen with white glistening cyst wall. Cyst was aspirated/decompressed

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Fig1. Octogenarian Female with Huge Abdominal Mass (Ovarian Cyst)

slowly and 25.7 liters of fluid was aspirated. On decompression, it was observed that cyst was originating from left ovary. Right Ovary and Uterus were unremarkable. Total excision of the cyst was done that measured 975 gms by weight. Total Volume of the cyst was calculated to approximate 27 kgs. Histopathological examination suggested benign mucinous cyst adenoma of the Ovary. (Fig. 1-3)

Discussion

Giant ovarian cysts have become rare in current medical practice in both developed and developing nations. The same is attributed to the widespread use of modern imaging techniques such as ultrasound and CT. (9,10) Detection of Ovarian cyst cause considerable worry for women because of fear of malignancy but it is an established fact that many ovarian tumors present as cysts, but all cysts are not tumors. Serous tumors are most common cystic neoplasm of the ovary, 60% of which are benign, 25% are malignant, and 15% are borderline cases. Serous tumors usually present as large masses, up to 40 cm in diameter. The vast majority of mucinous tumors are benign (75%), 10% borderline, and 15% carcinomas. (6)

The definition of huge ovarian cysts has not been well described in the literature. Some authors define large ovarian cysts as those more than 10 cms in diameter measured on pre-operative scan. Others define large ovarian cysts as those reaching above the umbilicus. (11,12) The case under report well fits into the criteria of giant/large ovarian cyst, it being 58 by 46 cm in cranio-caudal dimensions on ultrasound/CT scan and extending up to tip of xiphoid process. Benign Mucinous cyst adenoma is reported to occur in middle-aged women. It is rare among adolescents (13,14) or in association with pregnancy. (15) Furthermore, the studies in the literature substantiate the rarity of ovarian cysts in elderly females. (16, 17) Ours was an octogenarian female and mucinous



Fig2. Ovarian Cyst wall after its Excision (975 gms by weight)



Fig 3. Abdominal Incision Closed

cyst adenomas are extremely rare in such an advanced age. Only 10% of primary mucinous cyst adenoma is bilateral. (5) In our case, the tumour was unilateral, thick walled cyst of the left ovary filled with sticky gelatinous fluid and was 27 kgs by weight. It is probably one of the biggest ovarian cysts operated in an octogenarian female.

The most remarkable descriptions of large ovarian cysts are those of Spohan (1962), who reported 148.6 kg (328 lb) and Symond (1963) who reported 79.4 kg (175 lb). (16) Furthermore, Miquel Zamora *et al* (1992) reported 72 kg ovarian cyst whereas, Mohammad Kazem *et al* (2010) reported a 12 kg ovarian cyst, (18,19). Furthermore, Farinetti A *et al* 2 reported excision of 23 kg ovarian cyst. One of the major differential diagnoses of ovarian cysts are omental cysts. Omental cysts occur in all age groups, but most often they present in children and young adults. (20) These masses may be simple or multiple, may be huge, and simulating ascites. Ascites is another entity that must be included in the list of differential diagnoses. Other diagnoses may be mesenteric cysts, cysts arising from retroperitoneal structures like pancreatic pseudocysts, urinary retention, bladder diverticulum, hydronephrosis, cystic lymphangiomas, choledochal cysts, splenic cysts, multicystic dysplastic kidney, gastrointestinal duplication cysts and large uterine tumors. (21,22) Management of ovarian cysts depends on the patient's

age, the size and structure of the cyst and menopausal status. Surgical management of cysts is by laparotomy or laparoscopic cyst excision or cystectomy with oophorectomy. Although many studies have advocated and claimed successful removal of giant/large/huge ovarian cyst laparoscopically (23-27) yet there is hardly any study that has claimed laparoscopic removal of large ovarian cysts. Nagele & Magos (28) did ultrasonographically guided drainage followed by laparoscopic excision of a large ovarian cyst, whereas O. Ates *et al* (29) also adopted same procedure to treat giant ovarian cyst. A major factor that makes the gynecologic surgeon decide to perform laparotomy is definitely the size of the ovarian cyst. So in view of huge size of the cyst clinically and on preoperative Ultrasonography & CT Scan laparoscopy excision was not contemplated in our patient. We successfully decompressed and totally excised the large cyst through an infraumbilical midline laparotomy incision.

Conclusions

Although Giant/Large Ovarian Cyst Cysts have not been clearly defined yet it is said that Ovarian cysts more than 10cms are considered as Large Ovarian cysts. Two histopathological variant are Serous and Mucinous. Majority are benign. Although sporadically reported in the past, due to health education and better diagnostic modalities today such huge cysts are hardly reported in the literature and that too in such an elderly age group. Although Laparoscopic surgery has been contemplated in small to moderate sized ovarian cysts yet there is hardly any case report of Laparoscopic removal of Giant/Large Ovarian cyst. Hence laparotomy and total excision of cysts in these situations is the treatment of choice until or unless laparoscopic surgery is clubbed with pre-operative decompression of the cyst under ultrasound or CECT guided aspiration.

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