



A CASE REPORT OF 3.31 KG MUCINOUS CYSTADENOMA OF THE OVARY IN A POSTMENOPAUSAL WOMEN

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ABSTRACT

Almost 60% of total ovarian tumors are of epithelial origin.. Serous tumors are commonest cystic ovarian tumors and mucinous being the second most common. Majority are unilateral but rarely they can be bilateral. Epithelial ovarian cancer is the commonest gynecological malignancy that can cause mortality.

KEYWORDS : Mucinous cystadenoma, benign, postmenopausal

INTRODUCTION

Ovarian tumors are asymmetric in early stages when their size is small, and become symptomatic in later stages when the size increases gradually. 60% of all the ovarian tumours are of epithelial origin. 10-15% are mucinous tumours out of which 75% are benign. 90% of cases are unilateral and occur in the age group of 30-50 years¹. In this case report we have discussed a 50 year old post menopausal female who initially presented due to recurrent abdominal pain and heaviness. After surgery a definitive diagnosis of benign epithelial ovarian tumour of mucinous type was made on the basis of pathological analysis. Early intervention in this case helped the patient get relieved of the symptoms.

Case Presentation

This case reviews the management of 50 year old female who presented on 20/1/2023 with a 3 month history of prolonged abdominal pain with heaviness. It was noted that this pain had increased over the week prior to her visit and was associated with increased frequency of micturition and diarrhoea over the past 2-3 days.

The patient visited the emergency outpatient department for these complaints where she was examined and suspected of having a pelvic mass by the on duty medical officer and sent for gynecological opinion.

The patient was a postmenopausal since past 3 years. As per her obstetric history, she had 4 full term normal vaginal deliveries with last delivery 20 years back and laparoscopic tubal ligation 15 years back.

Her past medical history revealed that the patient was a known case of type 2 diabetes mellitus since 3 months for which she took tablet Metformin 500mg twice daily. She had hypertension and hypothyroidism since 2 years for which she took tablet Amlodipine 5 mg and tablet Thyroxine 50mcg once daily in the morning. She had family history of type 2 diabetes in both her parents.

A physical examination revealed that the patient was well oriented to time, place and person.

Tongue, nail and conjunctiva were pink, pulse rate of 86/minute in the right radial artery and blood pressure of 130/82 mmHg as measured in the right brachial artery in sitting position.

Unremarkable cardiovascular and respiratory symptoms

assessment. Her abdomen was grossly distended upto the xiphisternum and tense, with no flank fullness. On percussion, a tympanic note was heard along with fluid thrill. On palpation, the mass was found to be non-tender, mobile and of pelvic origin, corresponding to upto 32-34 weeks of uterine size. It had smooth surface with well defined margins. Bowel sounds were not audible. Per speculum examination was suggestive of a normal, otherwise healthy looking cervix. The uterus was not separately palpable from the mass. No forniceal fullness felt.

Her blood investigations revealed Hb = 12.9 gm/dl, WBC = 9,800/cmm, platelets= 4,10,000/cmm and A positive blood group. Urine and stool routine micro was not suggestive of any abnormality. HbA1C = 5 and TSH = 4 mIU/l, serum creatinine = 1.1 mg/dl, HIV, HBsAg, RPR = non reactive.

As per the findings a presumptive diagnosis of benign cystic pelvic mass probably of ovarian origin was made and discussed with the patients and her relatives. The patient expressed her desire for definitive diagnosis and treatment and a CT scan along with tumor markers, CA-125, CEA and alpha fetoprotein ordered.

MDCT report was suggestive of approximately 15.0* 18.2* 17.8 cm size well defined hypo dense lesion with few thin internal septations, arising from pelvis. There was evidence of peripheral post contrast enhancement and few thin enhancing internal separation. No evidence of internal calcification, soft tissue or fatty components.

Superiorly, it extend up to supra-umbilical region on right side and anteriorly, it extend up to anterior abdominal wall on right side. Posteriorly, it compressed the fundus and posterior wall of uterus with displacement of adjacent bowel loops.

Inferiorly it compressed the dome of the distended bladder with preserved fat plane. Both ovaries not seen separately from the lesion. Left posterior-laterally, it just abutted the sigmoid colon. Rest organs were normal.

Tumour markers were normal. A decision of laparotomy for cystectomy with hysterectomy and bilateral salpingo-oophorectomy was taken and discussed with the patient and consent taken. Physician opinion was taken for pre operative fitness.

A pre operatively prepared patient was shifted to the operation theatre and bladder catheterised. Spinal

anaesthesia given and painting and drapping done. A midline verticle incision kept and abdomen opened layer wise. No adhesions identified with the surrounding organs. The intact cyst was exteriorized carefully to avoid rupture and observed to be of ovarian origin involving the left ovary. The right ovary and tube were normal and a bulky uterus seen separately.

The infundibulopelvic ligament was clamped, cut and transfixed bilaterally, enabling us to separate the ovarian mass in an intact manner. The anterior and posterior leaves of broad ligament separated and bladder retracted. The uterine artery was skeletonised and ligated bilaterally. The uterosacral ligament clamped, cut and ligated bilaterally with 1 number poly galactin to separate the uterus. The vaginal vault was closed in continuous interlocking manner. Haemostasis was checked in all stumps and abdomen closed layer wise. Skin closed in verticle mattress with 1 number epimide.

Haemodynamically stable patient was shifted to post operative ward and the specimen sent for histopathological examination. The mass was weighed and found to be of 3.31 kg.



Post operatively it was observed that the patient was relieved of the pain and pressure symptoms and discharged on post operative day 7 after urine and stool was passed.

Stitch removal was done on day 14 and stitch line found to be healthy. The pathological analysis demonstrated a gross uterus and cervix of 10.2*5.5*4.5 cm size with single intramural fibroid of 0.5*0.5 cm on the anterior wall of the body of the uterus with normal cervix. Right ovary of 3*1.7*1.5 cm with right fallopian tube. Left ovary with cystic mass of 23*16*7 cm with attached fallopian tube.

Microscopy was suggestive of benign mucinous tumor lined by tall columnar epithelial cells with dark basal nuclei with apical mucin and absence of cilia with gland like growth pattern. No increase in mitotic activity, necrosis, or high grade nuclear features were seen. The findings were consistent with a diagnosis of mucinous cystadenoma. The uterus showed foci of adenomyosis and tiny leiomyoma.

DISCUSSION

Large ovarian tumours are a rare case these days due to better diagnostic tools during these days. A delay in diagnosis can be attributed to the asymptomatic nature of the tumour and the non specific nature of the symptoms². Sometimes the symptoms can also mislead the provisional diagnosis made. Most of the mucinous ovarian cysts have found to occur in post menopausal women followed by reproductive age group and very rarely in pediatric and adolescent age group³. The mucinous cysts have a high tendency to progress to a large size and reach massive size like that of 3.31 kg as seen in our case.

They are asymptomatic in early stages and present with

pressure symptoms like abdominal pain, heaviness, increased micturition, gastro intestinal symptoms, respiratory distress, lower limb edema and varicosity⁴. They are unilateral in most cases and may rarely be bilateral accounting to only 10-15%.

Mucinous tumours may vary from small to very large cystic masses with smooth surface and a pedicle. The surface may be lobulated due to the multiloculated nature of the tumour. They are partially cystic and partially solid. The cyst is filled with mucoid fluid rich in glycoproteins⁵.

Histopathologically, they are lined by tall columnar epithelial cells with dark basal nuclei with cells filled with mucin in the apical region. They do not have cilia. Sometimes they may show gland like or papillary growth patter. Based on the mucin producing cells, there are three different types. The first two types include the endocervical and intestinal epithelial cell type. The third is mullerian type which is associated mainly with endometriotic cyst⁶.

The modality of investigation following clinical examination is an ultrasound examination. CT scan and MRI are done in doubtful cases where the nature or the origin of the mass may not be identified on ultrasound⁷.

Management will depend on various factors like symptoms, severity, age of the patient, nutrition, comorbidities, whether fertility is desired or the menopausal status, nature of the tumour, accessibility of the medical facility and the expertise of the operating surgeon.

Patients with such tumours generally require surgical intervention requiring multidisciplinary approach.

Intra operative care has to be taken to remove the cyst intact and avoid the spillage of its contents which can lead to pseudomyxoma peritonii that can lead to adhesions among the intestinal loops⁸.

Other complications include torsion which is the most common complication followed by rupture⁹. Intra cystic hemorrhage, infection, adhesions to the surrounding organs and malignant transformation are other rare complications.

Ovarian torsion is a surgical emergency as it occurs mostly in females of reproductive age groups. Malignant and very large masses are less prone to chances of torsion.

CONCLUSION

In this case, the low socio economic status and the poor literacy, along with low grade of the symptoms pertaining to the asymptomatic nature of the tumour are some of the important factors responsible for the delay in seeking care and identification that lead to the very large size of the mass. With increasing awareness and better and cheap diagnostic tools more cases are identified at early stages these days. Mucinous cystadenoma has the potency to grow to very large sizes compared to other tumours.

Through this case report, we try to highlight the importance of early diagnosis and management of ovarian masses through surgical interventions.

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