

## CASE REPORT

### GIANT OVARIAN CYST—AN UNUSUAL FINDING

**Mukhtar Mehboob, Samina Naz\*\*, Muhammad Zubair\*, Muhammad Ashraf Kasi\*\*\***

Department of Surgery, \*Department of Medicine, Mohtarma Shaheed Benazir Bhutto Hospital Quetta, \*\*Department of Gynaecology, Murshid Hospital & Health Care Centre Hub River Road Karachi, \*\*\*Department of Radiology, Bolan Medical College Quetta, Pakistan

A 16 year old unmarried girl presented with complaints of abdominal distension, vomiting, constipation, difficulty in breathing and restlessness. On examination abdomen was grossly distended with fluid thrill. Ultrasonographic examination revealed that there was a huge cystic collection with internal debris, multiple septations involving the whole abdomen and pelvis originating from right ovary. The left ovary was normal. Her laparotomy was done. A giant ovarian cyst measuring 45×32×28 cm, which weighed 18 Kg (almost 1/3 of whole body weight), was removed as such like a yoyo balloon. Post-operative recovery was smooth. Histopathological examination revealed that it was mucinous cystadenoma.

**Keywords:** Giant, ovarian cyst, Mucinous cystadenoma, ovary

J Ayub Med Coll Abbottabad 2014;26(2):244-5

## INTRODUCTION

Ovarian tumours are one of the common health problems. In the United States, a woman's life time risk of developing ovarian tumour from birth to age 85 years is approximately 1.5%. In 2007, ovarian tumour caused 15,000 deaths in the United States and more than 140,000 worldwide.<sup>1</sup> They may be symptomatic or asymptomatic found on routine ultrasonographic examination. The most remarkable descriptions of giant ovarian cysts are those of Spohn, who in 1922 reported one that weighed 148.6 kg (328 lb) and Symmonds, who in 1963 reported one that weighed 79.4 kg (175 lbs).<sup>2,3</sup> A case of 66 years old postmenopausal woman from south India presented with a giant serous cystadenoma of 23 kg has been reported.<sup>4</sup> These findings have become rarer as imaging modalities have improved and diagnoses are made earlier.

Giant ovarian cyst has a significant morbidity. The purpose of this case report is to highlight the differential diagnosis, minimal invasive test to reach the diagnosis, and to report one of the giant ovarian cyst reported in our centre.

## CASE REPORT

A 16 years old unmarried female patient residing in a remote area presented with the complaints of abdominal distension, difficulty in breathing, vomiting, constipation, and restlessness. According to the patient, six months back she noticed a swelling in her abdomen which gradually increased in size. She was unable to walk due to dyspnoea. She had no history of fever, cough and jaundice. Her menstrual cycles were regular. She had a history of treatment from general practitioner but the record was missing.

On examination patient was ill looking, lethargic but well oriented in time and space. General physical examination revealed pallor and bilateral pedal oedema. Her vitals were normal. She weighed 58 Kg. On examination, abdomen was grossly distended with

engorged veins. Abdominal girth was 47 inches at the level of umbilicus. Fluid thrill was present and gut sounds were audible in the flanks. Rest of the examination was unremarkable. Provisional diagnosis of ascites and ovarian cyst was made. Her routine investigations were insignificant. Serum CA125 was 42.51 IU/ml. Abdominal ultrasonographic examination revealed that there was a huge cystic collection with internal debris, multiple septations involving the whole abdomen and pelvis originating from right ovary, while left ovary was normal. Mild to moderate hydronephrosis was seen on both sides with hydroureters. X-ray chest was normal except raised dome of diaphragm on both sides. Finally a diagnosis of ovarian mass made and surgery was planned. Informed written consent was taken from the parent. Abdomen was opened via midline incision. There was a huge cyst occupying the whole of the abdomen. There were few adhesions between the cyst and anterior abdominal wall which were dissected. Whole of the cyst was pulled up, pedicle was clamped, ligated, tied and excised. The huge cyst from the abdomen was delivered out as such. Left ovary was normal and there was no ascitic fluid. The paraaortic lymph nodes were not enlarged. Rest of the abdominal viscera were normal. Abdomen was closed. Whole of the ovarian cyst was weighted; it was 18 Kg (almost 1/3 of patient's body weight). It measured as 45×32×28 cm. It was sent for histopathological examination. Biopsy report revealed that it was mucinous cystadenoma. Patient recovery was uneventful without any complications.

## DISCUSSION

Ovarian neoplasms may be divided by origin cell type into three main groups: epithelial, stromal and germ cell. Taken as a group, the epithelial tumours are by far the most common type.<sup>5</sup> In a study conducted in Lahore the epithelial ovarian cancer constituted about 8.4% of all female cancer. All patients were symptomatic before the

diagnosis with majority having ascites (38.5%).<sup>6</sup> Mikos *et al* reported a case of giant ovarian cyst in a 59 years old postmenopausal woman weighing 73 kg at admission complaining of dyspnoea and abdominal distension.<sup>7</sup> Our patient was a 16 years old girl with regular menstrual history. Her weight was 58 kg at admission with complaints of abdominal distension, difficulty in breathing, vomiting, constipation, and restlessness. Giant ovarian cyst mimicking ascites, pseudopancreatic cysts, huge hydronephrosis, urinary retention, urinary bladder diverticulum and large uterine tumour have been reported in the literature.<sup>8</sup> In our case provisional diagnosis of ascites and ovarian cyst was made. Patients in our setups seek medical advice late due to illiteracy, strong religious beliefs and financial constraints. Specific sonographic features, pathognomonic of giant ovarian cyst, are: intraperitoneal origin, liver compressed over right kidney (not free floating), absence of other intraperitoneal structures such as floating of bowel loops within the abdomen, and Doppler ultrasonography revealing a vascular pedicle. The combination of ultrasound techniques (morphologic assessment, colour Doppler flow imaging, and Doppler indexes) have been found to perform well (sensitivity=84%, specificity=82%, positive likelihood ratio=4.69) compared to computed tomography (sensitivity=81%, specificity=87%, positive likelihood ratio=6.81) in the diagnosis of ovarian lesions.<sup>9</sup> In our patient ultrasonographic examination revealed that there was a huge cystic collection with internal debris, multiple septations involving the whole abdomen and pelvis originating from right ovary, while left ovary was normal. Mild to moderate hydronephrosis was seen on both sides with hydroureters.

In a study conducted in Peshawar 61 (89.71%) patients had benign tumour while 7 (10.29%) had malignant ovarian tumour. The commonest histological pattern observed were epithelial tumours (76.5%) including both benign and malignant tumours. The commonest benign tumour was serous cyst adenoma (24%) followed by mature cystic teratoma (18%). Common malignant ovarian tumours were granulosa cell tumours and endometrioid carcinoma (each 28.5%).<sup>10</sup> In our patient the histopathological report revealed that it was mucinous cystadenoma.

## CONCLUSION

Giant ovarian cyst is unusual in this modern era of technology. Patients with abdominal distension or abdominal mass must undergo early non-invasive

investigation like ultrasonography for quick diagnosis in view of its potential morbidity. Technical expertise coupled with surgical management can lessen morbidity and mortality of such patients.

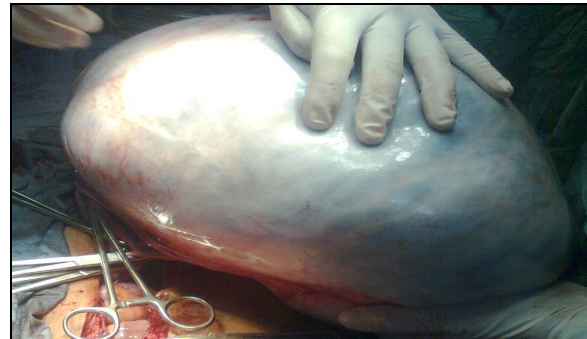


Figure-1: Post-operative view of giant Ovarian Cyst



Figure-2: Post-operative view of giant Ovarian Cyst

## REFERENCES

1. Gascia M, Jemal A, Ward EM, Center MM, Hao Y, Siegel RA, *et al*. Global cancer facts and figures 2007. Atlanta GA: American Cancer Society; 2007.
2. Young TH, Lee HS. Images in clinical medicine. Giant ovarian cyst. N Engl J Med 2008;358:e22.
3. Sima M. Giant paraovarian cyst. J Obstet Gynecol India 2006;56:352-3.
4. Sujatha JJ, Babu SC, Giant ovarian serous cystadenoma in postmenopausal woman, a case report. Cases J 2009;2:7875.
5. Mulayim B, Gurkan H, Dagli V, Mulayim S, Aydin O, Akkaya H. Unaware of giant serous cyst adenoma: A case report. Arch Gynaecol Obstet 2006;273:381-3.
6. Asif F, Sattar A, Shaharyar. Clinicopathological features of epithelial ovarian cancer. Ann King Edward Med Uni 2006;12(1):82-5.
7. Mikos T, Tabakoudis GP, Pados G, Eugenidis NP, Assimakopoulos E. Failure of ultrasound to diagnose a giant ovarian cyst: A case report. Cases J 2009;2:6909.
8. Menahem S, Shvartzman P. Giant ovarian cyst mimicking ascites. J Fam Pract 1993;39:479-81.
9. Kinkel K, Hricak H, Lu Y, Tsuda k, Filly RA. US characterization of ovarian masses: A meta-analysis. Radiology 2000;217:803-11.
10. Yasmin S, Yasmin A, Asif M. Clinicohistological pattern of ovarian tumours in Peshawar region. J Ayub Med Coll Abbottabad 2008;20(4):11-3.

## Address for Correspondence:

Dr. Mukhtar Mehboob, House No. 5-11-84 (777), Gulshan-e-Patel, Quarry Road, Quetta, Pakistan.

Cell: +92-314-8138528, Email: mehboob87300@yahoo.com