

## Retraction

The article " When a giant ovarian cyst poses a diagnostic dilemma" is retracted by the Editor-in-Chief, on the request of corresponding author and co-authors.<sup>1</sup> The corresponding author informed that the patient described in this article, although willingly gave her consent for revealing her clinical data for publication, later withdrew her consent after knowing about the publication of clinical material during she came for a follow up visit.

## REFERENCES

1. Rajesh BS, Dutta S, Rohith G, Vaishnavidevi R. When a giant ovarian cyst poses a diagnostic dilemma. Int J Res Med Sci 2020;8:2326-8. DOI: <http://dx.doi.org/10.18203/2320-6012.ijrms20202287>.

## Case Report

# When a giant ovarian cyst poses a diagnostic dilemma

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### ABSTRACT

Ovarian cysts seldom reach sizes of greater than 10cm. But when they attain the huge size, they pose a diagnostic challenge. Many a time, these can be confused with other cystic lesions in the abdomen such as mesenteric cysts, inclusion cysts, and peritoneal hydatidosis. Thorough clinical examination with radiological and serological investigation assistance, diagnosis can be made in certain cases. Authors present a case 40 year old female who presented with a painless huge abdominal cystic mass which was initially thought of as a hydatid cyst based on the positive serological test result during the initial evaluation. She underwent laparotomy during which it was found to be a simple ovarian cyst. Excision of cyst along with left salpingoovariotomy was performed. Huge abdominal cystic swellings need thorough clinical, radiological and biochemical analysis before planning further treatment. False positive test results should be kept in mind before proceeding before planning any intervention.

**Keywords:** Abdominal cystic mass, Giant ovarian cyst, Hydatid ELISA

### INTRODUCTION

Huge cystic abdominal tumors often present with a diagnostic challenge. The most common cystic lesions which are not missed by routine clinical examination and radiological imaging are gynaecological tumors and mesenteric cysts.<sup>1</sup> Ovarian cysts rarely reach giant size, presenting with diameters greater than ten centimeters.<sup>2</sup> Cysts reaching that large size may be confused with mesentery cysts, peritoneal inclusion cysts or rarely primary peritoneal hydatidosis.<sup>3,4</sup>

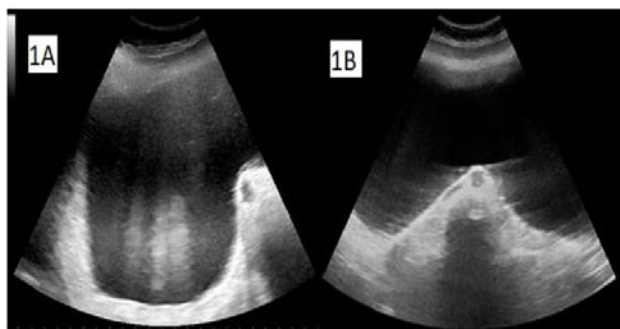
The most common symptoms associated with these huge cystic lesions are mostly gastrointestinal symptoms like abdominal fullness and vomiting but, many a time, ovarian cysts reach enormous size without raising any symptom. Authors present here, a case of giant ovarian cyst in a middle-aged female, with diagnostic dilemma clinically and radiologically, but that turned out to be a simple serous cyst of the ovary on Histopathological examination.

### CASE REPORT

A 40-year-old lady presented to the surgery out-patient department with a huge distension of abdomen for the past 1 year. It was initially small and gradually increased in size. She did not complain of any pain or discomfort or any difficulty in food intake or breathlessness. Her bowel habits were normal. She had no other complaints other than of a feeling of water splashing inside her abdomen while movement. There were no menstrual abnormalities. She was a mother of two children and underwent vaginal hysterectomy for menorrhagia fifteen years back. On examination, she had generalized distension of the abdomen without any localized fullness. Umbilicus was stretched and there were no dilated veins or visible scars. There was no organomegaly or palpable mass. There was no tenderness and the abdomen was soft with normal bowel sounds. Shifting dullness was absent while fluid thrill was present. Hernial orifices were normal with no renal angle or spinal tenderness. Per vaginal examination

was unremarkable while per rectal examination did not reveal any fullness in the pouch of Douglas.

Clinically, the diagnosis of hydatid cyst was made since she was from the endemic area with the differentials of mesenteric cyst and ovarian cyst. Her blood investigations were unremarkable. Her abdominal ultrasound showed a large well-defined anechoic cyst noted within the abdominal cavity extending from epigastrium till dome of bladder about 25x11cm with no obvious solid areas or septations noted inside (Figure 1).



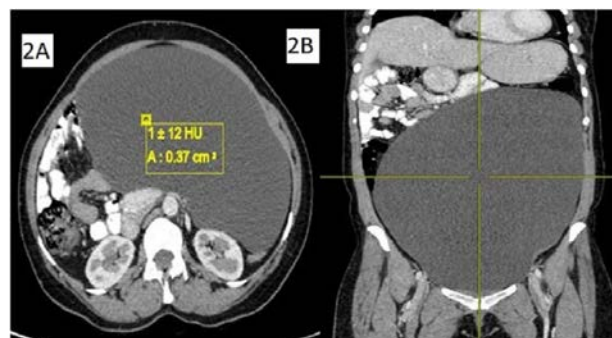
**Figure 1: (A) Solid areas noted inside the cyst. (B) Anechoic cystic lesion without any septations.**

She underwent further evaluation. To rule out the possibility of peritoneal hydatidosis, an ELISA of IgG levels against Echinococcus antigens was done, which came out positive and was repeated the second time since the imaging investigations were not suggestive of hydatid cyst but, ELISA turned out to be positive for the second time as well. All her other biochemical parameters were within normal limits. There was a possibility of ovarian malignancy, so tumor markers were obtained, CEA and CA-125, which were in normal limits too (Ca-125 =7.20 (<35) CEA =0.6(0-3).

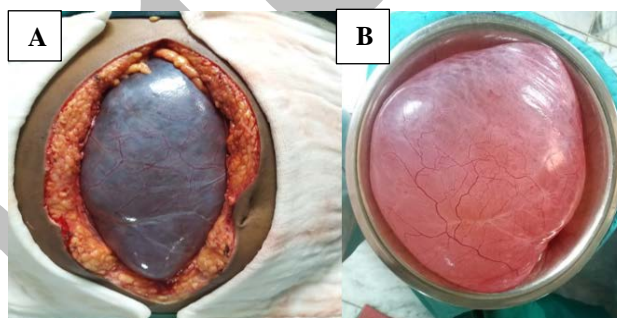
Due to the diagnostic dilemma which now presented, authors took a contrast-enhanced CT scan. CT showed a large uninoculated simple cyst which was intraperitoneally extending deep into the pelvis, with the rest of the bowel loops completely pushed to one side (Figure 2). There was no solid component or septation seen within the cyst. The radiologist had an impression of a mesenteric cyst or an omental cyst but again, the left ovary could not be visualized separately from the lesion and so the possibility of ovarian cyst could not be ruled out.

The patient was posted for laparotomy for exploration. Diagnostic laparoscopy was deferred due to the huge size of the cyst and associated risk of rupture of the cyst (while creating pneumo-peritoneum) leading to the complication of anaphylaxis (hydatid serology was positive twice). She underwent laparotomy, the abdomen was opened carefully with caution not to rupture the cyst while opening the abdomen which revealed a huge cystic

lesion around 25x20cm in size arising from the left ovary (Figure 3). Bowel loops were present posterior to the cyst and the cyst had no attachment to bowel loops or small bowel mesentery. The liver was normal. The cyst was excised in toto along with left salpingoovariotomy.



**Figure 2: (A) Axial and (B) Coronal view of CECT demonstrating hypo-attenuating fluid-filled lesions in both the sections.**



**Figures 3: (A) Intra-operative pictures; ovarian cyst in situ and (B) cyst excised in toto with left ovary and fallopian tube (ovary and fallopian tube not seen in the picture).**

## DISCUSSION

Ovarian cysts do not attain huge sizes, but the huge cysts can be easily missed as most of these are clinically silent and won't cause any serious symptoms. Nevertheless, these cysts tend to rupture or undergo torsion which will present with sudden onset severe pain, nausea, vomiting, internal hemorrhage, etc and so should be treated. Confirming the diagnosis is of importance as the treatment plan and surgical approach differs if the cyst is due to peritoneal hydatidosis. The diagnostic dilemma, in this case, was due to the hydatid ELISA serology test coming positive twice and imaging investigations like ultrasound and CECT being equivocal about any of the diagnoses. This also points out over reliability on investigations over clinical examination. The patient did not have any GI symptoms and was in the reproductive age group which should have clinched the diagnosis of ovarian tumor/cyst. The place of residence of the patient being from endemic area and serology tests coming positive for hydatid made us incline towards the diagnosis of Hydatid Cyst, the importance of which was

there during surgery to prevent inadvertent rupture leading to anaphylaxis.<sup>5</sup> Authors should also be mindful of the hydatid antibody detection (sensitivity and specificity of antibody assay by ELISA) and its cross-reactivity in non-hydatidosis patients.<sup>6</sup>

## CONCLUSION

In cases of large abdominal cystic masses, it is always better to have the support of diagnostic adjuncts like radiological and biochemical investigations which in this case could have possibly prevented intra-operative disasters like anaphylaxis.

However, false positive results of these biochemical tests should be kept in mind, but it is always advantageous to be over-prepared rather than under-prepared and all the necessary measures to tackle the anaphylaxis are to be undertaken.

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