

## CASE REPORT

# Massive Endometroid Ovarian Carcinoma and Synchronous Uterine Malignancy

Shazia Sultana<sup>1</sup>, Rubina Hussain<sup>2</sup> and Wasiya Irfan<sup>3</sup>

## ABSTRACT

The diagnosis of ovarian carcinoma is a challenging task especially when women usually present vague symptoms like abdominal distension and pain. The aim of this paper is to report a case of synchronous ovarian malignancy in a young patient. A 36 year old unmarried female presented with a huge right ovarian cystic mass occupying the whole abdomen, breathlessness, jaundice and urinary retention. She underwent laparotomy for surgical removal of the mass and during the surgical procedure a frozen section was performed that showed malignancy. Total abdominal hysterectomy and bilateral salpingo oophorectomy was thereafter performed on her. Final histopathological report of the mass revealed well differentiated endometroid ovarian cancer and endometroid endometrial cancer. Synchronous endometroid tumors are generally present in young patients; these tumors tend to be of low grade malignancy. Prognosis of endometroid carcinoma is relatively better than other histological types.

**KEY WORDS:** *Endometroid Tumour, Total Abdominal Hysterectomy, Bilateral Salphingo-Oophorectomy, Laparotomy.*

### <sup>1</sup> Shazia Sultana

Senior Registrar, Department of Obstetrics and Gynecology, Ziauddin University Karachi

### <sup>2</sup> Rubina Hussain

Chairperson and HOD, Department of Obstetrics and Gynecology, Ziauddin University Karachi

### <sup>3</sup> Wasiya Irfan

Student, Ziauddin University & Hospitals Karachi

### Corresponding Author

Shazia Sultana

## INTRODUCTION

Ovarian cysts and tumors grow silently and are often undetected for years. They usually do not cause pain but if large they present with discomfort. Ultrasonographic scanning permits early detection and appropriate treatment. Occasionally, ovarian cysts reach enormous dimensions without raising any symptoms.<sup>1</sup> The simultaneous occurrence of two genital tumors is relatively of unknown etiology. Synchronous endometroid carcinoma of the uterine corpus and ovary is an uncommon but well known phenomenon. Such cases may represent as either separate independent primary or as metastatic tumors requiring careful consideration of a number of gross and histological features. These features illustrate the criteria helpful in distinguishing independent primaries from metastatic carcinomas which have a different therapeutic implication.<sup>2</sup>

## CASE

A 36 year old unmarried female presented to the gynecology and obstetrics department at Ziauddin Hospital Karachi with massive abdominal distension and pain. The patient had been noticing abdominal distension since last two years; she perceived this distension as weight gain and took homeopathic medication for weight reduction. Associated symptoms included breathlessness, loss of appetite and anuria due to pressure effects of the ovarian mass. There was no history of colicky pain, vomiting or any other gastrointestinal symptoms. There was no previous history of any other illnesses or family history of any malignancy. When inquired about her menstrual history her age of menarche was 13 years, menstrual cycles were regular with normal flow for first 5 years after menarche. Thereafter at the age of about 18 years patient developed prolonged menstrual cycles and she menstruated after 8-12 weeks each time. The flow was excessive and patient bled for 8-9 days at each menses.

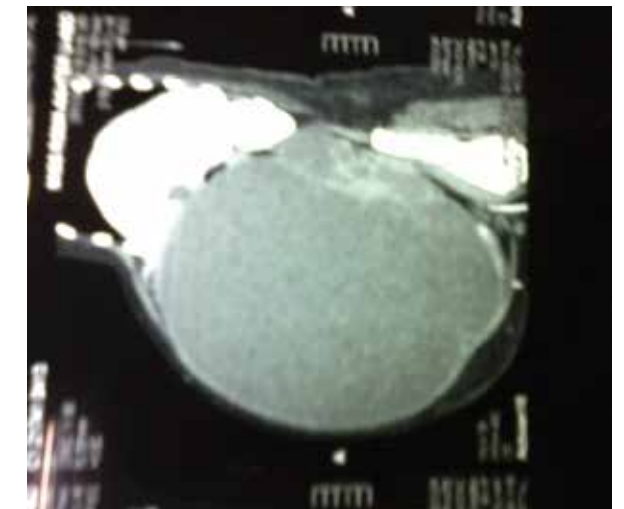
On admission to the hospital the patient weighed 78kgs. General physical examination revealed pallor, jaundice and pedal edema while rest of the examination was unremarkable. Abdominal examination showed generalized abdominal

distention (Fig. 1) with huge mass arising from pubic symphysis to xiphisternum. Percussion over abdomen was dull and there was no shifting dullness present. Bowel sounds were heard normally. A vaginal examination was not performed.

**Figure 1: Generalized Distension Of The Abdomen Is Evident.**



**Figure 2: Abdominopelvic CT Scan Of The Patient**



The patient's laboratory investigations revealed Hb 6gm/dl, urea 120mg/dl, creatinine 4mg/dl, indirect bilirubin 4mg/dl and total bilirubin 5mg/dl. Tumor marker alpha feto protein was 3.88ng/ml and CA-125 was 65.44 IU/ml. Patient's transabdominal ultrasound revealed a large solid cystic mass arising from the right adnexa measuring 32.0 by 27.0 by 33.0 cm. It showed internal septations and solid component with low level echoes. The uterus appeared normal and was completely separated from the mass.

Abdominopelvic CT scan confirmed large right ovarian cystic mass (Fig. 2) with internal septa and solid component. CT scan showed mass causing compression and displacement of small and large bowel loops. The mass was abutting gall bladder and undersurface of liver and was compressing the aorta, inferior vena cava and iliac vessels. There was mild right sided hydronephrosis and hydroureter present. Chest X ray showed right lung collapsed due to large mass.

A multidisciplinary team of physicians and surgeons managed the patient preoperatively. She was transfused 2 units of packed cells to correct her anemia and she was maintained on dialysis till her urea and creatinine were under normal ranges. After receiving surgical fitness patient was listed for an elective laparotomy. Preoperatively the patient and her family were counseled about the possibility of malignancy of the ovarian mass and were told that the nature of surgery will depend on the on-table report of the frozen section of the mass. If report would suggest malignancy, the surgery would be converted from cystectomy to transabdominal hysterectomy with bilateral salphingo-oophorectomy.

The patient underwent laparotomy with a midline incision extending above the umbilicus. After opening layers, a large tense, smooth surfaced cystic mass was noted (Fig. 3). There was no free fluid in the abdomen. The mass observed was large and could not be removed intact. Approximately 9 liters of purulent dark brown yellowish foul smelling fluid was drained and after that the cyst measuring 30 x 24 x 25cm was removed and sent for frozen section. Frozen section reported malignant tumor. The family of the patient was informed followed by proceeding of hysterectomy and bilateral salphingo-oophorectomy with omentectomy.

**Figure 3: The Mass Post Abdominal Layer Opening**



The postoperative period was uneventful and patient was discharged on 10<sup>th</sup> postoperative day. The patient's weight was reduced from 78kgs to 62kg postoperatively. The histopathological report later confirmed synchronous endometrioid ovarian and uterine tumor. After consultation with the multidisciplinary team the patient was suggested to be further managed by chemotherapy and radiation both.

## DISCUSSION

The presence of two genital tumours at the same time is relatively uncommon and makes 0.63%<sup>3</sup> of all genital malignancies. Initial challenge for gynaecologic oncologist is to classify diseases of women with associated genital malignancies, especially of the endometrial carcinoma of the uterus and ovary. If endometrial carcinoma is present only in one half of the myometrium this is stage IA, while the stage IIIA tumor spreads to the serosa or adnexa. Carcinoma localized at the ovary without the rupture of the capsule is of stage IA, while ovary carcinoma that spreads to the fallopian tube or uterus is of stage IIA.

The association of endometrial ovarian carcinoma with uterus carcinoma is the most. While both etiology and pathogenesis are unknown, this may be attributed to the development of the surface epithelium of the ovary which has the same embryologic derivation from the müllerian duct. There is an assumption that those might, as particular objects, develop into independent neoplasm at the same time under the influence of some hormones.<sup>4, 5</sup> It is needed to classify disease

correctly as further treatment and prognosis depend on it. Some authors prefer histology criteria to make a difference between metastatic disease and independent occurrence. Sometimes, this distinction is difficult or even impossible.<sup>6</sup> The major criterion for endometrial carcinoma and ovarian metastasis is a multiple nodular ovarian tumor. Minor criteria are ovaries smaller than 5cm, bilateral affection, deep myometrial invasion, vascular invasion and fallopian tube affection. Major criterion, two or more minor criteria, as well as the absence of ovarian endometriosis is enough to make the diagnosis of metastatic disease.<sup>7</sup>

The tumor in our case penetrates more than half of the myometrium and invades cervical stroma but does not extend beyond the uterus nor does it involve both fallopian tubes; therefore, it can be classified as stage II. Tumor that penetrates deeply into the myometrium might indicate ovarian metastases, because it is well known there is no invasion or the invasion is superficial in cases of independent tumors. On the other hand there is a huge right ovarian cyst that comes out to be well differentiated from endometrioid carcinoma of the ovary; the tumour involves the ovarian surface along with element of endometriosis in cases of metastases from ovaries to uterus. There are no signs of lymphovascular invasion or penetration into fallopian tube, which speaks in favor of independent growth. Left ovary was enlarged 10 x 6 x 5 cm, showed endometrioid carcinoma, well differentiated type (histological grade I), nuclear grade II, omentum with massive areas of necrosis but no viable tumor and lymph node involvement which classify it as IB stage.

Our patient was 36 years of age, and it is well known that independent tumors occur in younger women more frequently, in contrast to independent tumors of endometrial or ovarian carcinoma which most frequently occur in the seventh decade of life, median age 41–52 years, obese, premenopausal and nulliparous women.<sup>8</sup> Synchronous tumors have also been linked to hyperestrogenic conditions (chronic anovulation, polycystic ovarian syndrome (PCOS), obesity, estrogen producing ovarian tumors, or unopposed estrogen replacement therapy). Our case is different in a way as the patient presented with an enormous cyst, she was young and her BMI was 22kg/m<sup>2</sup> but there was

history of prolonged cycle. Hyperestrogenemia may cause endometrial hyperplasia and in some cases endometrial carcinoma. Correlation between corpulence and ovarian carcinoma is not so clear. Certain studies suggest that corpulence in the adolescence increases the risk of ovarian carcinoma. Our patient has endometrioid tumor of the ovary and uterus. It is known that women present with simultaneous tumor of ovary and uterus are barren women in one third to one half of all cases. There are several reasons for that. Hormonal influence is very important. Some studies claim that the uterine body fallopian tubes and ovarian epithelium are one morphologic entity, which explains an independent development of the tumor in different compartments of müllerian tubes. The estrogen impact is crucial. Families with hereditary nonpolyposis colorectal carcinoma (HNPCC), and Lynch's syndrome have more probability for endometrial carcinoma.

Immunohistochemical analysis of some receptors might be a good indicator of the process development and treatment success.<sup>10</sup> Because of the lack of sufficient evidence clarifying whether it was the case of synchronic (based on clinical and PH findings) or metastatic endometrial carcinoma of endometrium and ovary, patient was classified as higher stage due to rupture of huge cyst during surgery and cervical involvement of endometrioid carcinoma, so she underwent complete radiation and chemotherapy. The five-year survival in synchronous tumors is excellent, 79%, in contrast to single primary ovarian cancer.<sup>9</sup>

To conclude ovarian cysts can present in any way management of ovarian cysts depends on the patient's age, the size, structure of the cyst and fertility issues and menopausal status. Risk factors and clinical outcome indicators in women with synchronous tumors are different from those based on histology division. It is necessary to identify synchronous primaries and metastatic tumors correctly as staging, prognosis and further management depend on it. In fact, standard criteria for differentiating between primary and metastatic tumors are likely to be misleading in this situation and additional testing is required. In the future, a better evaluation of the etiology of these diseases is needed; also, molecular diagnosis of



tumors in endometrium and ovary would give us a real confirmation.

REFERENCES

<sup>1</sup> Farinetti A, Butazzi A, Tazzioli G, Saviano L, Saviano M: Giant ovarian cyst. A case weighing 23 kg. Literature review. *Minerva Chir* 2003;58:261–265.

<sup>2</sup> Grammatoglou X, Skafida E, Glava C, Katsamagkou E, Delliou E, Vasilakaki T: Synchronous endometrioid carcinoma of the uterine corpus and ovary. A case report and review of the literature, *Eur J Gynaecol Oncol.* 2009; 30(4):437-439.

<sup>3</sup> Momcilo D, Slobodanka M. Gordana D, Bozidar J. Endometrioid tumor of the ovary and uterus, metastasis or not – Case Report. *Acta Medica Medianae* 2007; 47(4):15-19

<sup>4</sup> Eisuke K, Yoshinao O, Yoshihiro O, Sadafumi T,Shinya O, Toshio H at all. Frequent microsatellite instability in synchronous ovarian and endometrial adenocarcinoma and its usefulness for differential diagnosis. *Human Pathology* 2004;35(12):1484-1493.

<sup>5</sup> Seo-Yun T, Yong-Sek L, Jong-Sup P, Seog-Nyeon B, Jun-Mo L and Seung-Eun N. Clinical analysis of synchronous primary neoplasms of the female reproductive tract. *European Journal of Obstetrics& Gynecology and Reproductive Biology* 2008; 136(1):78-82.

<sup>6</sup> Catharina C. vanNiekerk,JohanBulten,,G. Peter Vooijs,and Andr´ eL.M.Verbeek: The Association between Primary Endometrioid Carcinoma of the Ovary and SynchronousMalignancy of the Endometrium.- Research Article. Hindawi Publishing Corporation Obstetrics and Gynecology InternationalVolume 2010.doi:10.1155/2010/46516.

<sup>7</sup> Chiang YC, Chen CA, Huang CY, Hsieh CY, Cheng WF. Synchronous primary cancers of the endome-trium and ovary. *Int J Gynecol Cancer* 2008; 18:159-164.

<sup>8</sup> Soliman PT, Oh JC, Schmeler KM, Sun CC, Slomovitz BM, Gershenson DM, Burke TW, Lu KH. Risk factors for young premenopausal women with endometrial cancer. *Obstet Gynecol.* 2005 Mar; 105(3):575-580.

<sup>9</sup> Williams,Melony G, Bandera, Elisa V, Demissie, Kitaw , Rodríguez-Rodríguez, Lorna Synchronous Primary Ovarian and Endometrial Cancers: A Population-Based Assessment of Survival.Obstetrics & Gynecology:2009April; 113(4):783-789.

<sup>10</sup> Richard RB, Maurie M et al., Principles and Practice Of Gynecologic Oncology. 5<sup>th</sup> Ed. Lippincott; 2009, 634.

CASE REPORT

Morgagni Hernia - Presenting as Vague Abdominal Pain Since 8 Years

Tahir Muhammad Yaseen<sup>1</sup>, Syed Asif Ali Zaidi<sup>2</sup> and Shafiq-ur-Rehman<sup>3</sup>

ABSTRACT

Morgagni hernia is the rarest type of Congenital Diaphragmatic Hernia(CHD). It accounts for 2% of all CHD cases and is detected incidentally through a chest xray The hernia occurs mostly on right side of diaphragm with incidence of 90%, 8% occur bilaterally and 2% limited to left side. It is predominant in females presenting symptom of abdominal pain. The presence of colonic sounds on chest examination is a significant finding in diagnosis. CT scans usually reveal a retrosternal or parasternal mass or fat density which represents omentum and air containing viscus. A case of a middle aged lady presenting with vague abdominal pain for the last eight years is reported. Suspicion was raised over a chest xray which highlighted the right dome of diaphragm being pushed up and the presence of gaseous shadow under the right dome .Subsequent computed tomography showed morgagani hernia . The patient underwent open transabdominal of the stomach and omentum , where the hernia sac not resected and a primary closure of the defect was performed. The post operative course was uneventful. Morgagni though rare, often remains undiagnosed and can lead to life threatening complications. Surgical intervention regardless of patient 's asymptomatic state should be offered to avoid complications.

**KEY WORDS:** *Congenital Diaphragmatic Hernia, Morgagni, Surgery.*

<sup>1</sup> **Tahir Muhammad Yaseen**

Resident, Department of Surgery, Ziauddin University & Hospitals Karachi

<sup>2</sup> **Syed Asif Ali Zaidi**

Resident, Department of Surgery, Ziauddin University & Hospitals Karachi

<sup>3</sup> **Shafiq-ur-Rehman**

Professor, Department of Surgery, Ziauddin University & Hospitals Karachi

**Corresponding Author**

Syed Asif Ali Zaidi