



CASE REPORT IN A TERTIARY CARE HOSPITAL - SYNCHRONIZING CANCER LIKE PRIMARY ENDOMETRIAL CANCER WITH PRIMARY OVARIAN CANCER

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Abstract : Synchronous Primary Cancer are relatively uncommon in general population. About 0.5 to 1.7 of women with gynecological malignancies have Synchronous Primary Cancers of female genital tract. Primary endometrial and Ovarian Cancer are most common combination. Synchronous Primary Cancers have a better overall prognosis when compared with those who have single organ disease either in the ovary or endometrium with metastasis. In this case report, 48 yrs old multiparous woman was diagnosed to have Synchronous Endometrioid adenocarcinoma and Cyst adenocarcinoma of ovary. Patient underwent preoperative chemotherapy, followed by Staging Laparotomy with Total Abdominal Hysterectomy with Bilateral Salpingo-oophorectomy, Infracolic omentectomy, splenectomy, appendicectomy and Pelvic lymph node dissection. She was followed up with adjuvant chemotherapy now patient is on regular follow up.

Keyword : Endometrial Cancer, Ovarian Cancer and Synchronous Cancer.

INTRODUCTION:

Synchronous Primary Cancer of the Endometrium and Ovary, occur in approximately 10% of all women with Ovarian cancer and 5% of all women with Endometrial cancer. Cancer of both endometrium and ovary can be categorised into three groups, 1) Primary in the ovary with secondary in the endometrium, 2) Primary in the endometrium with secondary in the ovary, 3) Independent primary in the endometrium and ovary – Synchronous cancer. The following are the pathological criteria used to determine whether the tumour of endometrium and ovary represent metastatic disease or independent primary tumours.

Primary in the ovary with secondary in the endometrium

1. Histologic similarity of the tumors
2. Large ovarian tumors –small endometrial tumor
3. Ovarian endometriosis present
4. Location in ovarian parenchyma
5. Direct extension from ovary predominantly into outer wall of the uterus
6. Spread elsewhere in typical pattern of ovarian carcinoma
7. Ovarian tumour unilateral (80 –90% of cases) and forming single mass

8. No atypical hyperplasia in the endometrium.

Primary in the endometrium with secondary in the ovary

1. Histologic similarity of the tumors
 2. Large endometrial tumors –small ovarian tumor
 3. Ovarian endometriosis absent
 4. Deep myometrial invasion
 - a) direct extension into adnexa
 - b) Vascular space in the myometrium
 5. Hilar location, vascular space invasion, surface implant or combination in ovary
 6. Spread elsewhere in typical pattern of endometrial carcinoma
 7. Ovarian tumour bilateral and multinodular
 8. Atypical hyperplasia of the endometrium additionally present
- #### **Independent primary in the endometrium and ovary**
1. Histologic dissimilarity of the tumors
 2. No or only superficial myometrial invasion of endometrial tumour
 3. Ovarian endometriosis present
 4. Ovarian tumour Located in ovarian parenchyma
 5. Absent of other evidence of spread of endometrial & ovarian tumour.
 6. No vascular space invasion of endometrial tumour
 7. Ovarian tumour unilateral (80 –90% of cases)
 8. Atypical hyperplasia of the endometrium additionally present
 9. No hilar location, vascular space invasion, surface implant or combination in ovary.

CASE HISTORY :

A 48 years old P6L6, Post menopausal woman was referred as a case of Ovarian malignancy, From Dhamapuri Govt hospital. She complained of Abdominal pain for the past six months and Abdominal distension for the past two months, with history of loss of weight and loss of appetite for the past four months. She attained menarche at the age of 14. She is married for the past 15 years. All six deliveries were normal vaginal deliveries and She breastfed all her children upto one year. She had regular menstrual cycles, Once in 30 days, Flow lasting for 5 to 6 days. She attained menopause 5 years ago. No family history of Malignancy. On Examination, her general condition was fair. She was not anaemic and not icteric. Vitals were Stable. Abdomen

was distended and Umbilicus was flattened. There was a transversely enlarged mass of about 14cms x 12cms, arising from the pelvis, with variable consistency and irregular margins. Free fluid was present in the abdominal cavity. Pervaginal examination showed a healthy cervix, pointing backwards. Uterus was Anteverted, exact size of which could not be made out. A mass was felt through the left fornix which was in close approximation with the uterus. All Basic investigation were within normal limits. Serum level of CA -125 was 934 IU/ml. Ultrasonogram Pelvis showed a normal sized uterus. The endometrial thickness was 9.3mm. A well defined mixed echogenic lesion of about 14cms x 8.5cms, with septations and solid components was seen in the left adnexa. Chest x ray was normal. MRI of abdomen and pelvis showed a large heterogeneous abdomino pelvic mass probably a malignant left ovarian tumour. There was a nodule in the endometrial cavity suggestive of Endometrial Polyp, Ascities, diffuse peritoneal fat stranding and a solitary enlarged aortic- caval lymph node of about 1.3cms below the level of renal hilum. There was a Tiny supracapsular nodule in 8th segment of liver suggestive of Hemangioma. Endometrial biopsy revealed malignant epithelial neoplasm composed of malignant epithelial cells, arranged in glandular papillary pattern with high grade Vesicular nucleus and significant mitotic activity, Suggestive of Grade II Endometrioid adenocarcinoma of uterus.

MANAGEMENT :

Based on clinco –radiological findings and histopathological examination of Endometrium, a diagnosis of Synchronous Primary endometrial and Ovarian Cancer, FIGO stage 3 was made. The patient underwent palliative chemotherapy for 3cycles with inj. Docetaxel 120mg iv and inj. Carboplatin 450mg iv. After completion of palliative chemotherapy, ultrasonogram Pelvis revealed reduced endometrial thickness and Serum level of CA 125 also decreased. She underwent staging laparotomy findings were as follows, there was moderate ascities. Peritoneal nodules were seen. Liver surface appeared normal. Omentum appeared normal. Size and surface of uterus, right ovary and both tubes appeared normal. Left ovary was irregularly enlarged to about 14cms x 12cms. Consistency was variable. The mass was not adherent to the adjacent structures. Total abdominal hysterectomy with bilateral salpingo oophorectomy, Infracolic omentectomy, Peritoneal nodule biopsy and Right and Left pelvic lymph node dissection was done. All the specimen were sent for Histopathological examination. Ascitic fluid was taken and sent for Cytology. Post operative histopathological report revealed metastatic foci of papillary serous adenocarcinoma with focal infiltration into superficial one third of myometrium.

The Endometrium was showed atypical glandular hyperplasia. Left ovary showed cyst filled with friable hemorrhagic material, Papillary excrecences inside the ovary with solid area about 6cms x 5cms x 5cms was seen. There was a no capsular breach. Paraovarian connective tissue stroma and left fallopian tube and Right ovary were free from tumour infiltration. Appendix showed chronic appendicitis and free from tumour infiltration. There was no evidence of metastasis in Ectocervix, endocervix, Right & left pelvic lymph node and omentum. Spleen showed hemorrhagic areas. The above histopathological findings were suggestive of Synchronous endometrial adenocarcinoma of uterus grade II and cystadenocarcinoma of ovary. Based on post operative histopathological report, Patient underwent adjuvant chemotherapy for 3 cycles with inj. Docetaxel 120mg iv and inj. Carboplatin 450mg iv. The patient is on regular monthly follow up for the past one year. USG pelvis and CA 125 was done during every visit. There is no evidence of recurrence as of now.

DISCUSSION:

Diagnosis of synchronous cancer in our case was made based on the following pathological finding, which were consistent with synchronous cancers

1. The histological dissimilarity of tumour, like Endometrioid Adenocarcinoma of uterus and cyst adenocarcinoma of ovary.

2. There was only superficial myometrial invasion of endometrial tumour and serosa of uterus showed no tumor infiltration.

3. Atypical hyperplasia of the endometrium was present.

4. Ovarian tumour was unilateral.

5. Absent of other evidence of spread of endometrial & ovarian tumour, Like absence of adhesion between the left ovarian mass and left fallopian tube. Paraovarian tissue and left side fallopian tube were normal, both macroscopically and microscopically.

6. Ascitic fluid was negative for malignant cells.

7. There was no vascular space invasion of endometrial tumour (In spleen – congestion and hemorrhagic area were seen but it was free from tumor).

8. Appendix specimen showed Chronic appendicitis with free from tumour infiltration.

Women who developed endometrial or ovarian alone are predominantly Postmenopausal in the 6th to 7th decade of life, but in women with Synchronous Primary endometrium and Ovary Cancer, The median age at diagnosis is less. 10 to 29 % of young women age less than 45 years, with endometrioid cancer have synchronous serous ovarian cancer. The women with Synchronous Primary endometrial and Ovarian Cancer usually have a lower parity compared with women only one these cancers. History of familial cancer syndrome is often present in patients diagnosed with synchronous cancer. Hereditary Non polyposis colonic cancer have a 40 to 60% risk for developing endometrial cancer and 10 to 12% risk for developing ovarian cancer. Ovarian cancer which often presents with vague symptoms, like abdominal discomfort, intermittent abdominal pain and abdominal bloating, are more commonly diagnosed at an advanced stage, 75 to 85% at stage III or IV. But patients synchronous ovarian cancer present with early symptom and 66% are diagnosed at stage I and II. This early presentation is due to vaginal bleeding related to concurrent endometrial cancer at the time diagnosis. Patient with synchronous endometrial and Ovarian Cancers have an overall good Prognosis, with a 5 year survival of 86% and 10 year survival of 80%. Hormonal causes may be involved in the pathogenesis of synchronous endometrioid tumor with presence of concurrent endometriosis.

CONCLUSION:

Young patient with endometrial cancer have high incidence of synchronous ovarian cancer, it is important to distinguish between primary in the endometrium or ovary and secondary in the ovary or endometrium from the synchronous endometrial and ovarian carcinoma because synchronous tumor have a relatively better prognosis.

