J Obstet Gynecol Ind Vol. 53, No. 5 : September/October 2003 Pg 505-507

Primary Carcinoma of Fallopian Tube : Chemotherapeutic Response in Advanced Stage

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Key words : papillary adenocarcinoma of fallopian tube, cytoreductive surgery, cisplatin based chemotherapy

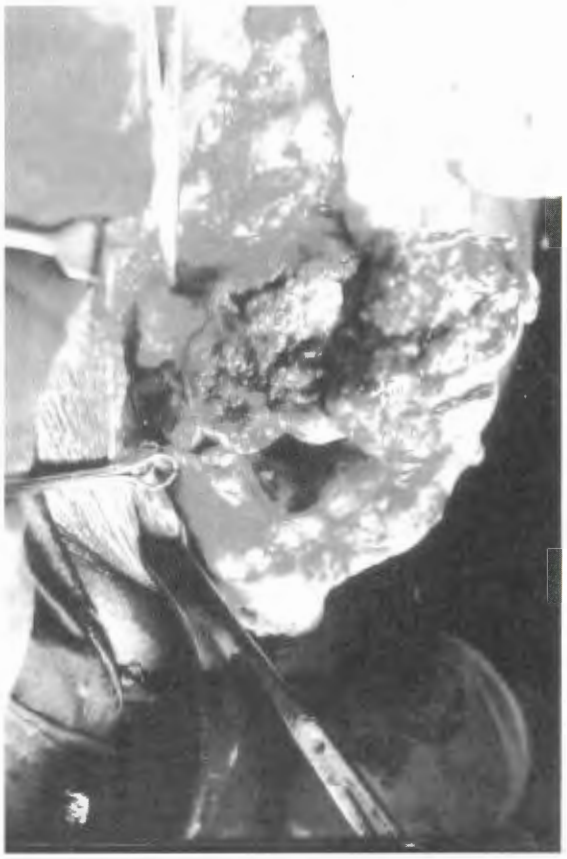
Introduction

Primary carcinoma of fallopian tube is a rare gynecological malignancy accounting for less than 2% of all gynecological cancers[1,2]. Preoperative diagnosis is usually not established in most of the cases and hence they are clinically diagnosed as ovarian malignancies. The prognostic factors are not well defined for the optimal modality of treatment[2]. We report two cases of stage III fallopian tube cancer who responded favourably to cytoreductive surgery and chemotherapy.

Case No. 1

A 50 year old para 3 who attained menopause six years earlier, was referred to us on 25th August 1997 from medical OPD on suspicion of ovarian malignancy. She complained of abdominal distension and difficulty in passing urine for one month. She did not have postmenopausal bleeding but suffered from non-specific white vaginal discharge for the past six months. On general examination, she was cachectic weighing 35 kg. and was dyspneic at rest. There was mild pallor and dehydration and she was normotensive. Breasts were atrophic and there was no lymphadenopathy. Her respiratory and cardiovascular system were normal except for tachypnea. The abdomen was grossly distended with tense ascites and there were multiple firm ballotable masses in the right lumbar region and right iliac fossa. On gynecological examination, the cervix was drawn up and flushed with vagina. The exact size of the uterus could not be appreciated. A firm mass was felt high up through the right fornix. A transabdominal USG showed free fluid in the abdomen and pelvis. The uterus measured 67 mm. and an echogenic mass of 10 x 8 cm was seen superior and to the right of the uterus.

Distension increased rapidly over a period of one week and therapeutic paracentesis was done on alternate days to relieve dyspnea. Ascitic fluid did not show any cellular elements on cytological examination. At laparotomy there was two litres of hemorrhagic ascitic fluid; uterus and both ovaries were normal. There was a hemorrhagic friable tumour measuring 10x15 cm. arising from the right lateral half of tube incorporating the appendix (Phogotraph 1).



Photograph 1 : A large necrotic mass is seen in the centre. The appendix is seen towards right (pointed by artery forceps) attached to the mass. The right ovary is normal and is seen inferiorly toward right (held with babcocks forceps). The second babcocks forceps points to the medial part of the right fallopian tube.

Omentum and intestines were studded with nodules larger than 2 cm. Two large masses of tumour measuring approximately 10 x 8 cm. were lying free in peritoneal cavity. The left fallopian tube, bladder and pouch of Douglas were normal.

Paper received on 21/5/02 ; accepted on 31/7/02

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Removal of free tumour masses from peritoneal cavity and right salphingectomy with appendicectomy were done. As the patient's condition was grave, hysterectomy was not undertaken. Two units of blood and four units of fresh frozen plasma were transfused. The surgical staging was stage III (FIGO). The patient remarkably improved 48 hour after surgery. The histopathological examination showed papillary adenocarcinoma of fallopian tube with extensive areas of necrosis and hemorrhage, appendix showed metastatic adenocarcinoma. She was advised six cycles of cisplatin based chemotherapy and second look laparotomy. But she received four cycles of cisplatin and cyclophosphamide and did not come for further follow up. After repeated reminders she was brought in the month of March 2001 and was found to be in a good state of health weighing 55 kg. There was no evidence of recurrence clinically. As she was not willing for further surgery, a CT scan was advised which she refused saying that she is in good health.

Case No. 2

A 65 year old para 4, post menopausal for 20 years who presented to the medical OPD with abdominal distension was referred to us to rule out gynecological cause for ascites.

Her past menstrual and medical history were normal and her only complaint was gradual distension of abdomen for the past three months. On general examination she was cachectic weighing 42 kg, normotensive, not anemic and had no lymphadenopathy. An abdominal examination revealed ascites but there was no organomegaly or any mass. Speculum examination showed the cervix and vagina to be healthy. On vaginal examination the uterus was found to be atrophic and retroverted while there were few firm nodules in the posterior and right fornix. She was hospitalized on 21st October 99 with provisional diagnosis of ovarian malignancy.

A transabdominal USG showed ascites but could not detect any pelvic or abdominal mass. Transvaginal scan revealed the uterus to be atrophic and studded with multiple small hyperechoeic areas of 5 mm x 5 mm. The left ovary measured 2.6 x 2.3 cm and the left tube was seen in its entire length floating in pelvic fluid. The right ovary measured 3.9 x 2.2 cm and there was an echogenic mass of 4 x 2.2 cm close to the right ovary. The medial half of the right tube was not visualised.

Ascitic fluid cytology showed lymphocytes, histiocytes and atypical cells suggestive of malignancy. Gastrointestinal endoscopy and hematological investigations were normal. Laparotomy on 29th October 1999 revealed three litres of straw coloured ascitic fluid with atrophic uterus with multiple small nodules on its serosal surface. There were small nodules of 0.5 x 1 cm. wide spread in peritoneal cavity on serosal surface of the intestine, mesentry, omentum and domes of diaphragm but not on the surface of the liver and gallbladder. The right fallopian tube was enlarged to 3x4 cm. with proliferative growth in the lateral half of the lumen. The uterovesical fold was studded densely with nodules.

Subtotal hysterectomy with bilateral salphingo oopherectomy and infracolic omentectomy was performed. The surgical stage was Stage III (FIGO). Histopathological examination revealed papillary adenocarcinoma arising from the right tube with metastasis on the uterine serosal surface, right ovary, left tube and omentum. She received six cycles of chemotherapy (cisplatin, cyclophosphamide and vincristine) and was on regular follow up. Her general condition improved remarkably and when last seen in December 2001 she did not have any evidence of recurrence clinically. Transabdominal and transvaginal USG performed showed the stump of cervix without any evidence of nodules.

Discussion

The establishment of preoperative diagnosis of tubal carcinoma is rare[2]. But it was suspected in a case reported by Hikoyoschichin[3] based on the findings of a sausage shaped solid mass on TVS, CT and MRI. In our second case suspicion arose on TVS because of the finding of normal ovaries, non-visualisation of lateral half of right tube and presence of a right sided solid mass of 4x2.2 cm. posterior to uterus along with ascites. Presence of ascites helps the tube to be visualized clearly and tubal peristalsis could also be appreciated well.

Though misdiagnosis is common, 90% of tubal carcinoma have symptoms such as vaginal discharge, irregular vaginal bleeding, pelvic mass and pain[3]. Both our cases had no vaginal bleeding though pelvic mass was present.

The poor prognostic factors are advanced stage of the disease an absence of closure of the fimbriated end of the tube and age of 66 years or more. The five year survival was 20% in stage III and IV as against 50% in stage I and II[1].

In the series reported by Jereczek[2], the five year survival rate was 33%, but there were no two year survivors in stage II to IV. The main adjuvant therapy was radiation and 18 out of 25 relapsed in this series. Postoperative whole abdominal external beam radiotherapy was found to be ineffective, when gross residual disease was >2 cm. in diameter and not effective enough in small residual disease of <2cm[6].

When patients with tubal carcinoma were subjected to cisplatin based chemotherapy, the overall clinical response rate was 80% with a five year survival rate of 35% in a series of 38 cases[5]. It was concluded from a retrospective analysis of 47 cases that aggressive cytoreductive surgery followed by platin based chemotherapy may offer the possibility of long-term control of primary tubal carcinoma[6].

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