Case Report

Primary fallopian tube carcinoma: A rare case report

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ABSTRACT

Carcinoma of the fallopian tube accounts for 0.3% of all cancers of the female genital tract1. There has been a rapidly increasing body of evidence supporting the fallopian tube as the site of origin of high grade serous ovarian cancer. This case report describes 37 years old female with known case of hypothyroidism who presented with pain abdomen which was diffuse, progressive. On examination, there was hard irregular mass around umbilicus. She was then subjected to further investigations and was taken for staging laparotomy. During surgery, specimens were sent for histopathological examination at Rohilkhand Medical College and Hospital, Bareilly. Histopathological examination revealed the diagnosis of primary fallopian tube carcinoma (PFTC). This case is unique since we started it as a case of bilateral ovarian mass but histology revealed it to be a PFTC.

KEY WORDS: Fallopian Tube Carcinoma; Histopathology; Primary Fallopian Tube Carcinoma; Prognostic Factors

INTRODUCTION

Incidence of carcinoma of the fallopian tube is 0.3% of all cancers of female genital tract.[1] With emerging studies,[2] it is seen that fallopian tube could be site of origin of high grade serous ovarian cancer (HGSOC). Furthermore, with rising number of histopathological examinations and with spurt in cases of HGSOC, there is chance of precursor lesions being in the fallopian tube. Serous tubal intraepithelial carcinomas show identical p53 mutations, just like high grade serous cancers. These are called p53 signatures. The distal part of the fallopian tube is more involved as compared to the proximal part.[3]We are presenting a case of primary fallopian tube carcinoma (PFTC) mimicking as a case of ovarian carcinoma.

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CASE REPORT

A 37-year-old P3+0 L3 with known case of hypothyroidism presented with complaint of pain in abdomen since 2 months which was diffuse and progressive in nature and moderate in intensity.

On examination, her general condition was fair, abdomen was soft, distended and ascites were present. It was tender on deep palpation; hard irregular mass of 4 cm × 5 cm around umbilicus was palpated. Its mobility could not be assessed due to obesity; borders also could not be assessed. On per speculum examination, cervix was deviated to the left side. On ultrasonography whole abdomen, there was mild hepatomegaly (17 cm) with fatty liver Grade I. Ascites was present. There were bilateral bulky ovaries with hemorrhagic cysts measuring 5.3 cm × 4.6 cm in right ovary and 4.2 cm × 2.4 cm in left ovary.

On MRI abdomen (plain), it was revealed that there are bilateral bulky ovaries showing complex solid cystic lesions with associated moderate ascites. There is suggestion of likely hemorrhagic content in right side ovarian lesions and both ovaries about each other in midline region and possible

Figure 1: Omentum specimen for histopathology

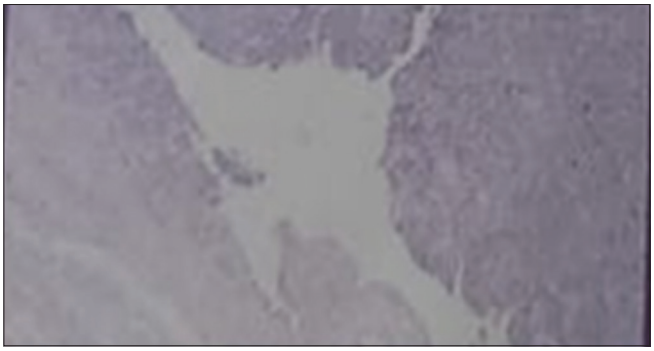

Figure 2: Histopathological image of the right fallopian tube

adhesions with sigmoid colon and small bowel. Furthermore, bulky globular uterus was seen with suggestion of thickened junctional zone which raises the possibility of adenomyosis.

On OT table, parietal peritoneum was thickened, inner layer was studded with deposits, and tissue was sent for biopsy. Straw colored ascitic fluid was seen and 2200 mL fluid was drained [Figure 1]. Omental caking was seen over transverse colon, approximately 15 cm × 15 cm in dimensions. Systematic visual and manual inspection were done. Liver, spleen, and gall bladder were normal. Whole of the bowel was studded with deposits. Transverse colon was adherent to omental caking and splenic flexure of transverse colon was adherent to omental cake. On clockwise palpation of gastrointestinal tract, appendix was found to be thick and inflamed. Pouch of douglas was obliterated. Bilateral ovaries were enlarged with smooth surface and cystic in consistency. Bilateral fallopian tubes were adherent over ovaries and ovaries were adherent to posterior surface of uterus and broad ligament and bowel. Total abdominal hysterectomy followed by bilateral salpingo-oophorectomy was performed. It was followed by appendicectomy followed by partial omentectomy and specimens were sent for histopathological examination. Ascitic fluid was negative for malignant cells. Histopathological examination revealed that it was a high grade papillary serous carcinoma which is likely PFTC FIGO Stage IV. Patient was then subjected to chemotherapy cycles with carboplatin and paclitaxel. [Figure 2]

DISCUSSION

PFTC is a rare malignancy with similar presentation to ovarian carcinoma. Although, similarities in histopathological examination adds to the dilemma of differentiating serous epithelial ovarian cancer from primary peritoneal serous carcinoma,[4] there are clear histopathological guidelines to differentiate these type of cancers. The fallopian tubes mostly have secondary's from other site of origin like ovaries, gastrointestinal tract, breast, or even endometrium.[1]

Here, we are presenting a rare case of PFTC based on histopathological criteria. Although the staging and treatment modalities of both the cancers is same, histology confirms the theory that ovarian carcinomas actually originates from the fallopian tubes.[5]

CONCLUSION

This case has rare presentation. We started this case as a case of bilateral ovarian mass, on table also it was not suggestive of PFTC but on sending specimens for histopathological examination, it was revealed that it is a case of PFTC which also lays the importance of histopathological examination of specimens and will further help in finding out the incidence of PFTC.

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