

**Carcinoma ovary with carcinoma cervix - A rare case of synchronous  
malignancy**

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**ABSTRACT**

Synchronous malignancies of genital tract are rare.

Case report

We report a case of carcinoma ovary with incidentally diagnosed carcinoma cervix. The patient had undergone total abdominal hysterectomy with bilateral salpingo-oophorectomy with omentectomy and pelvic lymph node dissection for a right ovarian tumor which was reported as borderline malignancy on frozen section. On histological examination the ovarian malignancy was diagnosed as borderline papillary serous carcinoma. The cervix section showed in situ squamous cell carcinoma. Pelvic lymph nodes and omentum were free of tumor. The postoperative period was uneventful and the patient has no signs of malignancy on follow up till date.

Conclusion

Synchronous malignancies are associated with better prognosis with surgical resection being the treatment of choice. Since synchronous malignancies are rare it has to be reported.

**Key words:** synchronous malignancies, ovarian carcinoma, carcinoma cervix, hysterectomy.

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**INTRODUCTION**

Synchronous malignancies of ovary and cervix are rare. Overall incidence of synchronous female genital tract malignancies is 0.63%.(1,2) Out of these the commonest is the endometrioid carcinoma of ovary and endometrium (40%) which carries a favourable prognosis.(1,3) The literature on both the spread of cervical carcinoma and metastatic tumors to the ovary indicates that ovarian involvement by cervical carcinoma is rare if cases of direct spread are excluded.(4)

The present case is rare and to best of our knowledge only three cases have been reported in the English literature with entirely different histopathology of ovarian and cervical malignancy.(4,5)

**CASE REPORT**

A 35 year old female presented with complaints of severe dysmenorrhoea and pain in lower abdomen. On examination a right pelvi-abdominal mass was palpable, cervix appeared

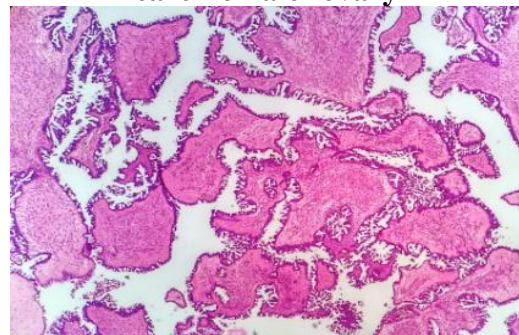
normal. Ultrasonography revealed a right adnexal cystic mass measuring 8.6x8.7cm with a solid component measuring 2.6x2cm. The diagnosis of cystic neoplasm of right adnexa was made (Fig USG). Her Tumor marker cancer antigen were evaluated and CA- 125 was found to be raised (CA 297.1 $\mu$ /ml.); whereas other tumor markers were normal. Patient underwent exploratory laparotomy and on intra-op frozen section the diagnosis of borderline malignancy was suggested. Patient underwent total abdominal hysterectomy with bilateral salpingo-oophorectomy, omentectomy and pelvic lymph node clearance. On gross examination we received total hysterectomy specimen with bilateral salpingo-oophorectomy, right ovary was replaced by solid cystic mass measuring 9x8cm filled with serous fluid. Rest of the specimen was grossly unremarkable.(Figure 1).

On histological examination the ovarian tumor was diagnosed as borderline papillary serous carcinoma (Figure 2) and the section from cervix showed in-situ squamous cell carcinoma (Figure 3). The post-operative period was uneventful. The patient is on regular follow up and has not shown any signs of metastasis radiologically till date.

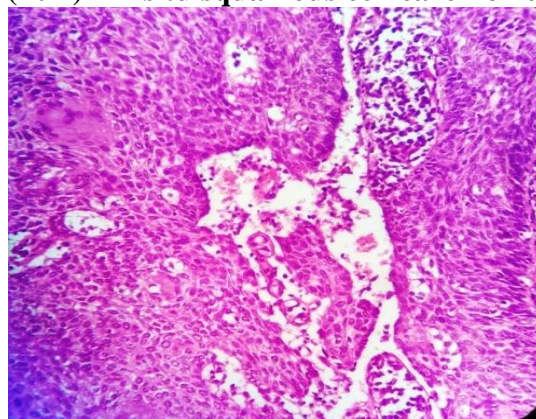
**Figure 1- Gross specimen**



**Figure 2 (10X)- Papillary serous carcinoma of ovary**



**Figure 3 (40X)- In-situ squamous cell carcinoma of cervix**



## **DISCUSSION**

Incidence of synchronous genital malignancy is rare. Literature shows only few case reports on synchronous cervical and ovarian malignancy. Primary malignancies of the genital tract

seem to occur synchronously more often than one would expect. (6)synchronous malignancies have better prognosis when compared to metastatic lesions of individual tumors. (7,8)A case study conducted by Elishaev E showed that endocervical adenocarcinomas, including some qualifying as microinvasive, can metastasize to the ovaries and simulate primary ovarian surface epithelial neoplasms.(9) Our patient had in situ squamous cell carcinoma cervix along with borderline papillary serous carcinoma. Less than 20 cases of three synchronous malignancies have been reported but all of them have a similar adenomatous histological picture.(10) One case of four synchronous malignancies of the genital tract with variations of adenomatous types have been reported in 2007.(11)Squamous cell carcinoma of the cervix being metastatic to the ovary is rare and has unusual ovarian histopathology for a primary.(12)

### **CONCLUSION**

Since the incidence of synchronous malignancies in female genital tract is rare, we need to report such cases so as to identify the embryological factors of carcinogenesis. Also it is necessary to thoroughly examine and look for synchronous malignancy if patient presents with symptoms related to single malignancy. Thorough histological examination is of utmost importance as in our case the patient had presented with ovarian mass and in situ carcinoma cervix was an incidental finding. Surgical management should be offered in all such cases as it greatly aids in diagnosis and also helps in improving overall survival(4). Long term follow up is necessary for diagnosis of metastasis and also to determine prognosis.

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