

*Case Report*

## Unusual Case of Bilateral Papillary Serous Cystadenocarcinoma of Ovary with Secondaries in Endomyometrium, Cervix and Appendix

Meera Mahajan<sup>1</sup>, Mukul Raj Jain<sup>2</sup>, Suparna Bindu<sup>3</sup>, Smita Mulay<sup>4</sup>

<sup>1</sup>Lecturer, <sup>2</sup>Chief Resident, <sup>3</sup>Associate Professor, <sup>4</sup>Professor & HOD,  
Department of Pathology, MGM Medical College, Aurangabad, Maharashtra.

Corresponding Author: Meera Mahajan

Received: 04/01/2014

Revised: 28/01/2014

Accepted: 31/01/2014

### ABSTRACT

52 years old female presented with pain in lower abdomen, white per vaginal discharge. Patient was known case of HIV with history of fibroadenoma in past. USG showed uterus with heterogeneous lesion with cystic spaces & enhancement in posterior myometrium. Ovaries showed well defined heterogeneous mass of size 72x84mm, not seen separate from right ovary with cystic spaces & irregular mural nodule. CA 125 level was 1242. Pap smear was done. Hysterectomy with bilateral salpingoophorectomy with appendectomy done. Uterus size 9\*5\*5 cm. Uterus was bulgy. Cut section showed well circumscribed capsulated tumor mass which showed cabbage like appearance and whorled pattern. Length of cervix 2.5 cm. Cervical canal was totally obliterated. Right ovary showed partly cystic and partly solid areas. Cystic part showed serous fluid and solid areas showed variegated appearance. Left ovary received in three pieces. Appendix externally congested, swollen, tip intact and lumen obliterated. Microscopically endomyometrium showed infiltration by tumor tissue. Myometrium showed well circumscribed tumor tissue with spindle cells having whorled pattern. Bilateral ovaries showed tumor tissue in which cells arranged in groups, papillary and glandular pattern and infiltrating into ovarian stroma. Appendix showed ulcerated lining mucosa and mucosal glands. Underneath submucosa and muscularis were infiltrated by tumor tissue. Pap smear showed few round to oval large cells with hyperchromatic eccentrically placed nuclei arranged in glandular pattern. Diagnosis given as Papillary serous cystadenocarcinoma of right and left ovaries with secondaries in endomyometrium, cervix and appendix.

**Key words:** Serous cystadenocarcinoma, metastasis.

### INTRODUCTION

Serous cystadenocarcinoma of ovary in general are bilateral tumors <sup>[1]</sup> and most of them are highly aggressive. <sup>[2]</sup> Metastatic deposits of these tumors have been reported in peritoneum, lungs, <sup>[3]</sup> liver and rarely spleen, <sup>[3]</sup> breast, <sup>[4]</sup> brain and spinal cord.

Persons who are HIV infected may be at higher risk for certain types of tumors than general population. <sup>[5]</sup> As reported, gynecological neoplasms in patient with HIV infection include cervical, vaginal, vulvar and gestational

trophoblastic disease. [6] The present case is of bilateral papillary serous cystadenocarcinoma of ovary metastasizing to endomyometrium, cervix and appendix without omental metastasis in an immunocompromised host.

**CASE REPORT**

55 year female having chief complains of dull aching pain in lower abdomen since 1 month and white pervaginal discharge since 1 month. Patient is known case of HIV. Patient was previously operated for fibroadenoma. USG showed ovaries with evidence of well defined heterogenous mass of size 72x84 mm, not seen separate from right ovary, with cystic spaces & irregular mural nodule. Uterus with heterogeneous lesion with

cystic spaces & enhancement in posterior myometrium, suggestive of fibroid with degenerative changes.

CA125 was raised bilateral salpingo-oophorectomy done.

Grossly right ovarian mass of size 5x6x4 cm. On cut showed partly cystic and partly solid areas. Cystic part showed serous fluid and solid areas showed variegated appearance and papillary projections at places (fig 1). Left ovary was received in 3 pieces, all of approximate size 2.5x1x0.5 cm. Microscopically bilateral ovaries showed tumor tissue consisting of round to oval tumor cells with hyperchromatic nuclei arranged in groups, papillary and glandular pattern with invasion into ovarian stroma(fig2). There are areas of haemorrhage and necrosis.



Fig.1Gross :Ovary showing tumor.

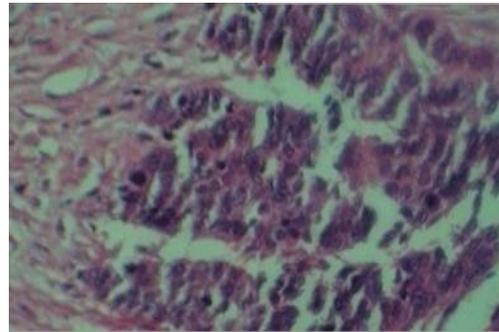


Fig.2 Ovary: Tumor cells arranged sheets and groups (H&E 40x).



Fig 3 Gross: uterus: showing fibroid.

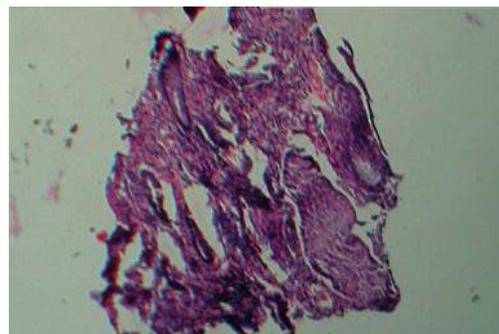


Fig. 4 Endometrium showing tumor invasion (H&E 40x).

Grossly Uterus was 9x5x5 cm in size. Uterus was bulgy and cut surface showed well circumscribed capsulated tumor mass with cabbage like appearance

and whorled pattern (fig3). Endometrial cavity is slit like Length of cervix was 2.5 cm. Cervical canal was totally obliterated. Microscopically section from endometrium

show round regular endometrial glands and invasion with tumor tissue (fig4). Myometrium show well circumscribed tumor with spindle cells having whorled pattern. Underneath tumor tissue arranged in glandular pattern (fig5).Cervix show stratified squamous epithelium lining.

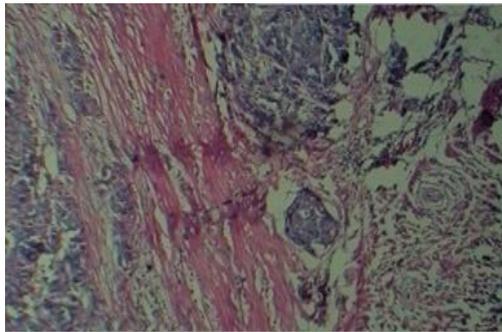


Fig.5 Myometrium showing metastatic tumor deposits (H&E 40×).

Underneath stroma is invaded by tumor tissue (fig6).

Appendix was externally congested, swollen and lumen obliterated. Microscopically mucosal lining is ulcerated, .Mucosal glands submucosa and muscularis are infiltrated by tumor tissue(fig7).

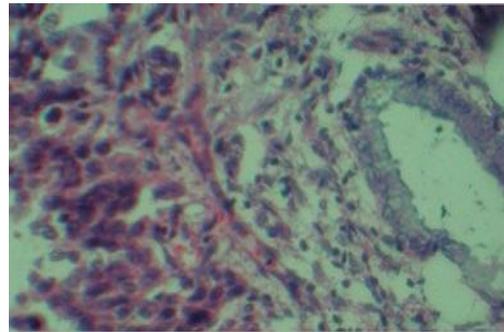


Fig.6 Cervix showing tumor deposits (H & E 40×).

Specimen of omentum with fibrofatty tissue pieces of size 43\*50\*5 cm. No hard area palpable. Microscopically no tumor invasion seen.

Pap smear show superficial and intermediate cells. Also seen are few round to oval large cells with hyperchromatic nuclei arranged in glandular pattern (fig8).

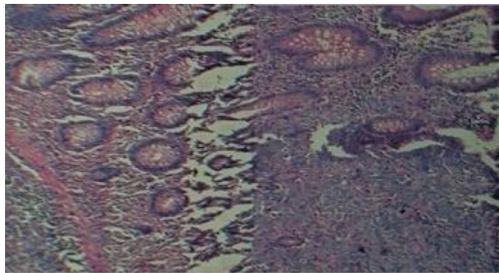


Fig 7 Appendix: submucosa & muscularis.

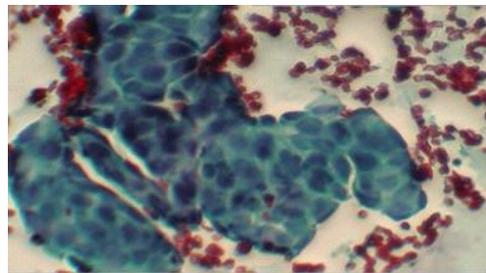


Fig 8 PAP smear showing sheets

## DISCUSSION

Considering gross and microscopic findings, tumour tissue seen in ovaries, endometrium, myometrium, cervix and appendix. There were possibilities of three differential diagnoses.

1. Papillary serous cystadenocarcinoma of ovary
2. Papillary serous adenocarcinoma of endometrium
3. Papillary adenocarcinoma of cervix.

The distinction is important because prognosis and treatment differ.

Question arises where is primary? There can be coexistence of uterine and ovarian carcinoma. The simultaneous presence of carcinoma in the ovary and uterus is uncommon but well recognized event. The two tumours may have a similar appearance or be of different histological types. Theoretically this phenomenon could be result of (1) metastasis from an endometrial carcinoma into ovary (2) two

independent primary tumour (3) metastasis from an ovarian carcinoma into endometrium. All three events probably occur, the third being far least common [2] which was seen our case.

The most common sites of involvement of ovarian serous carcinoma are the contra-lateral ovary, peritoneal cavity, para-aortic lymph nodes and pelvic lymph nodes and liver. With intra-abdominal spread there is often ascitis and involvement of omentum.[2] In our case metastasis seen in contra-lateral ovary endomyometrium, cervix and appendix without involvement of omentum and peritoneum.

## CONCLUSION

Synchronous tumours such as uterine leiomyoma and bilateral ovarian papillary serous cystadenocarcinoma with rare sites of metastasis in cervix and appendix without involvement of omentum and peritoneum in a patient with immunocompromised status and past history of fibroadenoma of breast, is the purpose of presentation of this case.

## REFERENCES

1. Scully RE, Young RH, Clement PB. Tumors of ovary, maldeveloped gonads, fallopian tube and broad ligament. In Atlas of tumor pathology. 3<sup>rd</sup> series, fascicle

23. Washington D.C.: Armed Forces Institute of Pathology;1998
2. Rosai J. Rosai and Ackerman's Surgical Pathology. 9<sup>th</sup> ed.(vol 2).New Delhi:Elsevier;2004.p.1661-2.
3. Seidman JD, Russell P, Kurman RJ. Surface Epithelial Tumors of the Ovary. In: Robert J. kurman, editor. Blaustein's pathology of the female genital tract, 5<sup>th</sup> ed.New Delhi:Springer;2004.p.838.
4. Klein RL, Brown AR, Gomez-Castro CM, Chambers SK, Cragun JM, Grasso-LeBeau L et al. Ovarian Cancer Metastatic to the Breast Presenting as Inflammatory Breast Cancer: A Case Report and Literature Review. J Cancer 2010;1:27-31.
5. Patel P, Hanson DL, Sullivan PS, Novak RM, Moorman AC, Tong TC et al. Incidence of types of cancer among HIV-infected persons compared with the general population in the United States, 1992-2003. Ann Intern Med. 2008 May 20;148(10):728-36.
6. Rojansky N, Anteby SO. Gynecological neoplasias in the patient with HIV infection. Obstet Gynecol Surv.1996 Nov;51(11):679-83.

How to cite this article: Mahajan M, Jain MR, Bindu S et. al. Unusual case of bilateral papillary serous cystadenocarcinoma of ovary with secondaries in endomyometrium, cervix and appendix. Int J Health Sci Res. 2014;4(2):213-216.

\*\*\*\*\*