Original Research Article

**Synchronous Papillary Serous Carcinoma of Cervix and a Benign Mucinous Tumor of Ovary - A Case Report**

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**ABSTRACT**

Papillary serous carcinoma of cervix has unpredictable and aggressive course. Here we report a case of coexisting infiltrating papillary serous carcinoma of cervix with a large mucinous cystadenoma of ovary. A 47 yrs old postmenopausal woman presented with irregular vaginal bleeding, abdominal heaviness and pain. The patient was diagnosed of having papillary serous carcinoma of cervix and an ovarian mass preoperatively. Patient was subjected staging laparotomy, followed by radical hysterectomy, lymphnode dissection and omentectomy. The biopsy revealed infiltrating papillary serous carcinoma with benign mucinous cystadenoma of ovary. Patient had postoperative radiotherapy and chemotherapy and patient has been on follow up for the last 1 year with good condition. Synchronous papillary serous carcinoma of cervix (PSCC) and a large benign mucinous cystadenoma of ovary have not been reported so far or this may be the only documented case.

**Keywords**
PSCC, Mucinous cystadenoma

**Introduction**

47 year old post menopausal woman presented with bleeding per vagina of 1½ month duration associated with foul smell, loss of weight, pain and heaviness of abdomen of 2 months. Patient had no significant family or personal history. Physical examination revealed pallor and soft to firm cystic mass about 32 weeks pregnancy size, all boarders well delineated, mobile. Per speculum examination showed a fungating necrotic foul smelling polypoidal growth in cervix,
finger could be passed all around the growth and cervix hypertrophied. Ultrasonography - a cystic 21x16 cms mass with thick septations, internal echoes in right adnexa extending into abdomen, in addition an isoechoic mass lesion of 6x5cms in cervix noted.ca 125 was 865.7 IU/ml.MRI abdomen showed a lobulated mass lesion arising from cervix infiltrating lower uterine segment, indenting posterior wall of urinary bladder. Planes with rectum preserved. The biopsy report of cervical lesion was papillary serous carcinoma. Further metastatic work up, ultrasonography of upper abdomen and chest x ray did not show any metastases in other organs.

Staging laparotomy i.e., radical hysterectomy with lymph node dissection, infra colic omentectomy was performed. Intraoperatively a large ovarian mass extending from pelvis to xiphisternum with intact capsule noted, left ovary was small and atrophic. There was a large globular mass from lower part of cervix. Other pelvic organs were normal. All the specimens were subjected for histopathological examination - report was infiltrating poorly differentiated high grade papillary serous carcinoma of endocervix exhibiting surface extension along endometrium and tube, to produce metastatic deposits in the peritoneum, obturator lymph nodes and on to the surface of mucinous cystadenoma of right ovary, external iliac lymph nodes and vaginal cuff was not involved. The ovarian tumor was reported as benign mucinous cystadenoma. Staging of the Malignancy was Stage-IV B as per FIGO. The patient was subjected for Radiotherapy followed by chemotherapy and has been on follow up with regular CA125.

PSCC is a rare histological variant of cervical adenocarcinoma and resembles similar tumour that occurs relatively more commonly in ovary, fallopian tube, endometrium and peritoneum. There is a paucity of literature on PSCC, with only less than 50 cases reported to date (Lurie, et al, 1991). Our case is exclusive in a sense that papillary serous carcinoma of the cervix coexistent with a large benign mucinous cystadenoma of the ovary a combination not reported so far in literature. Usually PSCC are aggressive if diagnosed in late stage but stage I tumour has same prognosis as that of cervical adenocarcinoma of the usual type (Shintaku and Ueda, 1993; Young and Scully, 1990 and Zhou, et al, 1998).

Serous adenocarcinoma of cervix resembles its counterpart in carcinoma of ovary and fallopian tube accounts for 3–4% of cervical malignancy. Most often these tumors are composed of papillary processes with fibrovascular stalks lined by highly atypical cells with stratification. Psammoma bodies are frequently observed. They are commonly admixed with other histological patterns but mixed tumors behave aggressively as pure serous carcinoma. Even patients with small proportion of serous (5%) component are at high risk of recurrence, serous carcinomas are often associated with lymph vascular involvement and deep myometrial invasion. The presence of lymphnode metastasis, positive peritoneal cytology and intraperitoneal metastases does not correlate with level of myometrial invasion. Even when these tumors appear to be confined to endometrium present like or endometrial polyp without myometral or vascular invasion, they behave more aggressively than endometroid carcinoma and have propensity to spread intra abdominally simulating ovarian carcinoma. In one series 37% of patients with serous carcinoma of endometrium confined to polyp demonstrated extraterine disease when subjected to surgical staging and exploration.
The multi institutional review of 206 patients with surgical stage I and II serous carcinoma demonstrated recurrence in 21%. Substage and treatment with platinum based chemotherapy were associated with improved overall survival. Stage I patients with myometrial invasion or extrauterine disease remain at high risk of both peritoneal and vaginal recurrence. Therefore platinum based chemotherapy and vaginal brachytherapy is considered is these patients.

Surgical treatment of advanced disease is no different from the endometroid subtype, consisting of complete extirpation of visible disease. A case report from mayoclinic showed cyto reduction to microscopic residual and was associated with a median survival of 51 versus 12 months. The
gynaecological oncology group study 184 included serous carcinoma and randomized patients to carboplatin and palcitaxel versus cisplatin doxorubicin and palcitaxel together with tumour volume directed radiation. The former demonstrated similar outcome with less side effect. Ongoing studies are evaluating the role of chemotherapy alone for these tumors especially because of high rate of peritoneal dissemination. It remains unknown whether radiation improves survival in addition to chemotherapy. For elderly patients with multiple comorbidities who cannot tolerate multimodal therapy, chemotherapy alone is indicated.

Mucinous cystadenoma account for 20% of all ovarian tumors. In 10% cases they are bilateral. The cysts are lined by tall columnar mucin secreting goblet cells and these secrete mucus material. The epithelium is bland and resembles glands of cervix and intestine.

References