### **Case Report**

## Early Stage Adenocarcinoma of Cervix with Ovarian Micrometastasis

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Adenocarcinoma of cervix is a rare malignancy of cervix. It is an aggressive tumor with a high incidence of metastasis. Ovarian metastasis in early stage adenocarcinoma is rare. Metastasis is usually seen when there is some other coexisting finding. In premenopausal patient and low-risk category, ovarian metastasis is very rare. Early stage adenocarcinoma of cervix can rarely present with ovarian metastasis. Thus, radical surgery with oophorectomy is an aggressive but practical approach in these patients but may not warrant removal in all cases. Ovarian metastasis places these patients at a higher stage. The management of these cases is not standardized, and prognosis is generally good.

**Keywords:** Adenocarcinoma of cervix, oophorectomy, ovarian metastasis

#### **INTRODUCTION**

A denocarcinoma of cervix is a rare type of cervical cancer accounting for 10%-20% of all cervical cancers. The incidence of ovarian metastasis in early Stage Ib adenocarcinoma cervix is <1%. In spite of criteria formulated to decide on ovarian preservation, a few low-risk cases may have unexpected ovarian metastasis.

#### **CASE REPORT**

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A 40-year-old parous woman presented with complaints of discharge per vaginum and lower abdominal pain since 5 years. She was P3 L3, all full-term vaginal deliveries; last child birth was 10 years back. She was ligated. She did not have any menstrual complaints.

On examination, her general physical examination was normal with no per abdominal findings. On per speculum examination cervix appeared congested and hypertrophied with a small ulcerated area at the lower lip of cervix. A primary diagnosis of cervicitis was made, and antibiotics were given. Routine Pap smear was taken and later, colposcopy was done. Pap smear report showed the presence of few sheets and occasional papillaroid clusters of endocervical cells at transformation zone. On colposcopy, a tiny ulcerative lesion was seen at 6 o' clock position, this area was taken for biopsy [Figure 1].

The histopathological report of cervical biopsy was well-differentiated adenocarcinoma. A clinical staging

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of cancer was done as Stage Ib1. No significant additional finding was present in ultrasound or computed tomography scan of the patient.

In view of high rate of metastasis of adenocarcinoma of cervix, the patient was posted for modified radical hysterectomy with bilateral salpingo-oophorectomy [Figure 2]. The histopathological report of the specimen showed well-differentiated adenocarcinoma confined to endocervix, tumor size <1 cm. The left ovary shows single microscopic foci of tumor deposits on the surface. All lymph nodes and vaginal cuff was free of tumor metastasis. Immunohistochemistry by Ki67 which is a proliferation marker confirmed it to be metastasis.

She received postoperative chemoradiation and now is doing well even after 3 years of surgery.

#### DISCUSSION

Cervical cancer is the most common cancer in females in developing countries. Most common histopathological type is squamous cell carcinoma (SCC). Adenocarcinoma accounts for 2%–4%.

Ovarian metastasis is found in about 5.3% of adenocarcinoma as compared to 0.79% in squamous

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Figure 1: Colposcopic image showing tiny ulcerative area at 6 o' clock position

type.<sup>[1]</sup> In Stage Ib, the rate is as less as 0.22%.<sup>[2]</sup> The risk of ovarian metastasis increases if the patient has at least one of the additional risk factor, i.e., postmenopausal status, adnexal pathology, or positive pelvic lymph node.<sup>[3]</sup> Ovarian preservation can thus be considered in young premenopausal patients with no other pelvic pathology.

A comparative study has been done by Natsume *et al.* to identify those patients with adenocarcinoma of cervix in whom ovarian preservation might be acceptable. It was found that deep stromal invasion and lymph node involvement were individual risk factors. According to this study, normally appearing ovaries in young women undergoing radical hysterectomy for Stage Ib adenocarcinoma can be preserved.<sup>[4]</sup>

A meta-analysis was conducted to lay down criteria to decide those patients in whom ovarian preservation was safe. It was concluded that ovarian preservation surgery may be safe in SCC patients without suspicious lymph node metastasis, parametrial invasion, and corpus uteri invasion, and in adenocarcinomas in patients who received neoadjuvant chemotherapy without Federation of Gynecology and Obstetrics Stage IIb disease, bulky tumor size (>4 cm), suspicious parametrial involvement (PMI), and Corpus uteri involvement (CUI).<sup>[5]</sup>

The index case discussed was in a low-risk category of ovarian metastasis according to the defined criteria's. A multidisciplinary clinical approach and discussion with the patient was done, and oophorectomy was planned. Thus, overcorrection was better than conservative idea in this case.

Adenocarcinoma is a rare and highly metastatic cancer. Classifying patients as low risk for the preservation of ovary may leave a small pool of patients undiagnosed. Treating these patients later may then be difficult.



Figure 2: Specimen of radical hysterectomy

Although according to the size of lesion, she was in Stage Ib, the presence of ovarian metastasis puts her into higher Stage IV. Optimal management of such cases is not well understood.

#### CONCLUSION

The given patient had a very low risk of ovarian metastasis. There has been an increasing trend of conservative surgeries in cancer patients of premenopausal age group. With this experience, it is suggested that judicious clinical decisions should be taken before deciding on conservative and preservative surgeries as a rare case of metastasis can be found similar to the one reported.

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#### **Conflicts of interest**

There are no conflicts of interest.

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