

Case Report

ISOLATED METASTASIS OF CERVICAL CANCER TO THE ABDOMINAL WALL

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ABSTRACT

Carcinoma of the cervix is a common neoplasm and accounts for a considerable number of cervical diseases that lead to death in developing countries. In these countries early detection and improved methods of treatment have resulted in comparatively better control of the cancer and long survival; however, invasive and metastatic disease still occurs. The authors present the case report of a 44-year-old woman with clear cell carcinoma of the uterine cervix with metastasis to the abdominal wall.

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Keywords: Clear cell carcinoma, Uterine cervix, Metastasis of cervical cancer, Neoadjuvant chemotherapy.

INTRODUCTION

Cervical cancer is spread through direct local and lymphatic pathways.¹ But hematogenous metastasis is relatively rare and so is the abdominal metastasis of cervical cancer.² Clear cell carcinoma (CC) of the cervix and vagina are identical in development and growth in the area of genital tract which are derived from Mullerian origin.^{3,4} Appropriate development can even be traced in young women with vaginal adenosis and in utero exposure to DES*. However, women with no exposure can also be involved.⁵ In recent years there has been an increasing number of CC affected young females who are in their 20-30s.⁶ Human papilloma virus (HPV) may be a cofactor in development of CC.⁷ Mutation in the P53 tumor suppressor gene is the second mechanism in the etiology of the rare tumor.⁸

CASE REPORT

A 44-year-old woman para 4 who suffered from abnormal vaginal bleeding was admitted by a gynecologist. Since she had a polypoid cervical lesion, biopsy was suggested and carried out respectively.

Postoperative histopathologic diagnosis was clear cell carcinoma of the cervix. A simple hysterectomy was performed in another hospital, and histologic evaluation showed a polypoid tumor with irregular surface approxi-

mately 6 cm in size protruding from the cervix correlating with clear cell carcinoma of the uterine cervix (Fig. 1). The patient received external radiation 5040 cGy in 28 fractions and at the end she was treated with only one course of chemotherapy consisting of cisplatin and 5 FU. She didn't return for further cycles. Nineteen months later, she was admitted to the Gynecology Clinic of Ghaem Hospital in Mashhad because of a painful abdominal mass.

Initial pelvic examination showed no abnormality and cervical pap smear was reported normal. In abdominal examination there was a tender mass with irregular shape. Previous external radiotherapy caused edema and thickness of the abdominal wall. Ultrasonography revealed the existence of an hypochoic mass (64×29mm) in the right side of the abdominal wall (Fig. 2).

Abdominal and pelvic CT scan showed normal other organs. Exploratory laparotomy of the metastasis was carried out and revealed an extensive tumoral right abdominal wall and pelvic side wall.

Due to wide extension of the tumor, complete resection was not possible. So the patient was treated with external radiotherapy with 3000 cGy and she received four cycles of chemotherapy with cisplatin and 5 FU (Fig. 3-4) respectively. At the end of treatment pelvic and abdominal examination were normal in serial follow-up. CT scan, sonography, pap smear and chest X-ray showed satisfactory results and no signs of recurrence were observed after 17 months of follow-up.

* DES: Diethyl stilbestrol.

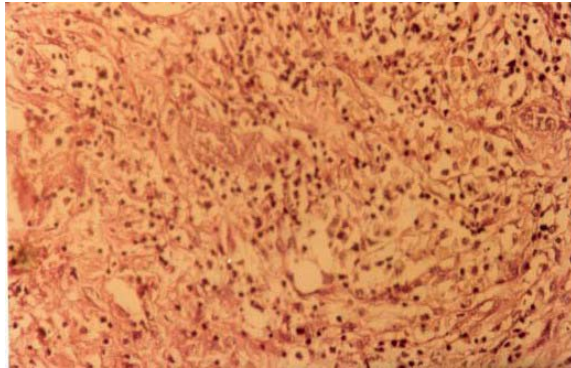


Fig. 1. Tumor cells diffusely infiltrating the cervical stroma. Cells have prominent clear cytoplasm and pleomorphic nuclei (H&E 250×).

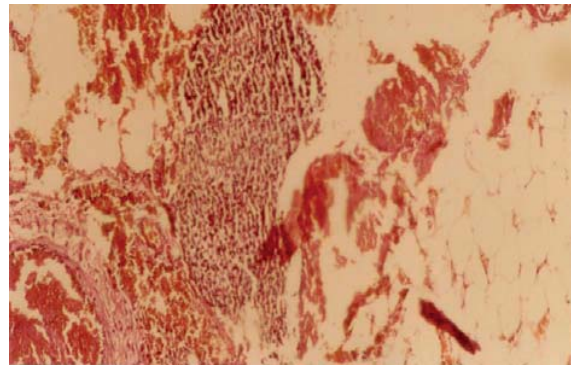


Fig. 3. Fibrofatty tissue of abdominal wall with nests of clear cell carcinoma (H&E 400×).

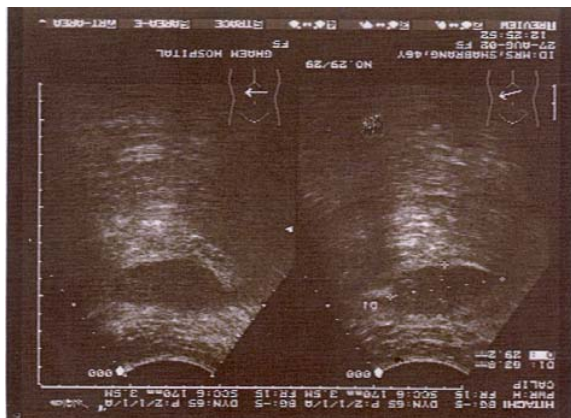


Fig. 2. Sonography: showing an hypoechoic abdominal wall mass.

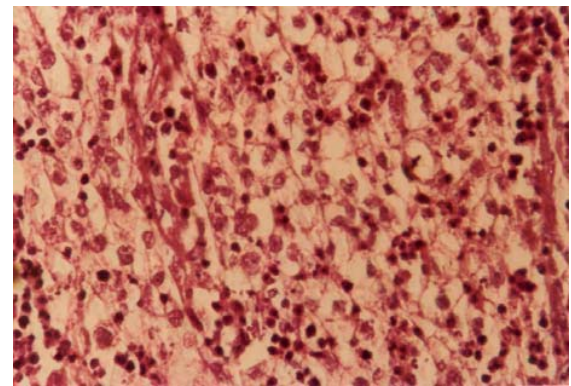


Fig. 4. High magnification of clear cell carcinoma of the abdominal wall shows diffuse infiltration cells with atypical nucleus and wide clear cytoplasm in PMN background. (H&E 400×)

DISCUSSION

Cervical carcinoma is the most common carcinoma in young females.⁹ Clear cell carcinoma of the cervix and vagina in births between 1948-1965 has been frequently seen with in utero exposure to DES.¹⁰

A study of 14 cases of CC suggested the etiologic role of HPV as a decisive factor.¹¹ Macroscopically CC is usually an exophytic tumor, while the microscopic appearance of the tumor in the vagina, cervix, endometrium and ovary are similar in histologic features.¹² Their tissues are composed of large cells with abundant clear cytoplasm and hobnail cells. Several other tumors and tumor-like lesions of the female genital tract may also contain clear cells and may be misinterpreted as CC.¹³

These misinterpretations usually refer to microglandular hyperplasia, mesonephric hyperplasia. Arias Stella changes, smooth muscle tumor with clear cell, yolk sac tumor, metastatic renal cell carcinoma, signet cell carcinoma and trophoblastic tumor.¹⁴ Because of the same histologic characteristics mentioned above adenocarcinoma of the cervix can also have a slightly poorer prognosis than squamous cell carcinoma (SCC) in each stage of the disease.^{15, 16} Since lymphatic metastasis of these tumors are higher than SCC and so is the grades. Distant metastasis is

also more common.¹⁶ In a survey of the medical literature the authors encountered different data that reported unusual distant metastases of cervical cancer to the humerus, psoas¹⁹⁻²⁰ and also abdominal wall metastasis in a few cases.²¹ However, we had not seen this pattern of metastatic clear cell carcinoma before this case.

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