



CLEAR CELL ADENOCARCINOMA OF THE UTRINE CERVIX IN A 70 YEAR OLD WOMAN NOT ASSOCIATED WITH DIETHYLSTILBESTROL: A CASE REPORT

KEYWORDS

Clear Cell Adenocarcinoma, diethylstilbestrol, human papilloma virus

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ABSTRACT *Clear cell Adenocarcinoma of cervix (CCA) is a rare tumor amongst cervical neoplasms with no history of exposure to diethylstilbestrol (DES). A review of literature was done regarding possible aetiology, prognostic factors and treatment*

INTRODUCTION

Carcinoma of the uterine cervix is the most common malignancy especially in developing countries like India. The most common malignant cervical neoplasm is squamous cell carcinoma. Adenocarcinomas constitute 12 to 15% of malignant neoplasm of cervix, histologically they are divided into Endocervical (NOS) type adenocarcinoma, Villoglandular, Mucinous, Minimal deviation adenocarcinoma, Enteric/ GI type Adenocarcinoma, Endometrioid type Adenocarcinoma, Clear Cell Adenocarcinoma (CCA), Serous Adenocarcinoma, Mesonephric Adenocarcinoma, Adenosquamous carcinoma, Adenoid basal Carcinoma and Adenoid cystic carcinoma. Clear cell adenocarcinoma (CCA) most commonly occurs in the ovary, followed by endometrium, vagina and cervix. Clear Cell Adenocarcinoma of cervix (CCA) is a rare entity which occurs usually in young individuals who were exposed to DES in utero. Primary CCA of uterine cervix in 70 year old women with no history of exposure to DES is still a rare entity. Patients with unremarkable medical history without any risk factors prompted us to report this rare case.

CASE REPORT

A 70 year old women presented with post menopausal bleeding. There is no history of exposure to DES. She is a multi parous women without any family history of cancer. Gynecological examination shows an ulcerated growth in the posterior lip of cervix smudging with the surrounding tissue. PAP smear examination was within normal limits. All Haematological, Bio Chemical and Radiological examinations were within normal limits. A Clinical Diagnosis of Carcinoma of cervix was made and punch biopsy was taken and sent to histopathological examination. Microscopy reveals malignant cells in tubular and papillary pattern with individual

cells showing clear cytoplasm and classical hobnail pattern. Based on the histomorphology. We reported the biopsy as clear cell carcinoma of cervix. She received complete treatment without any evidence of metastasis.

DISCUSSION

Clear cell carcinomas (CCAs) of the uterine cervix are cytologically, histologically, identical to their counterparts at other sites of the female genital tract such as the vagina, endometrial, and ovary (1, 2). They most likely arise from pluri potential reserve cells of the cervix that through faulty differentiation remain at an intermediate stage of development between keratinization and mucian secretion (3). The etiological factors considered or exposure to DES, Genetic

factors (4-6) instability of microsatellite repeat sequences (4), human papillomavirus (HPV), infection (7,8), bcl-2 protein overexpression (9), p53 gene mutations. Patients with clear cell adenocarcinoma fall into two clinical categories, those exposed to DES in utero and those with no exposure. An analysis of the Central Netheralnda Registry showed a bimodal age distribution of woman without exposure to DES, one peak at 26 years and a second peak at 71 years of age (6).

Cervical carcinomas can show endophytic or exophytic growth or a combination of the two. Endophytic growth tended towards deep infiltration. The Microscopic pattern is similar to clear cell carcinomas elsewhere in the female genital tract. The tubulocystic pattern is the most common. The tubules lined by cubiodal and flat cells with clear cytoplasm. Other characteristic patterns of growth are solid sheets of clear cells and papillary growth. Hyaline materials is often present in the stroma and in the core of the papillae. Mitotic figures are often inconspicuous, but

the nuclei are usually high grade. The immunophenotype is similar to that of clear cell carcinoma at other female genital tract sites positive for CK7, negative for ER, and negative for p53.

5-years survival rates were reported for patients with all stages of cervical CCAs range between 40% (18) and 64% (8). Stage tumor size, growth pattern, nuclear atypia, and mitotic activity are having prognostic significance (6). A significant correlation has been demonstrated between DNA ploidy level and survival in different types of cervical adenocarcinomas (10, 11).

Several authors have considered that the biological behavior and prognosis of CCAs are poorer than those traditional squamous cell carcinoma and non clear cell adenocarcinomas (7, 16, 17). The largest study, by Herbst et al (7) reported 5-year survival rates of 91, 77 and 60% for stage I, IIA, and IIB CCAs, respectively. In recent case series, patients with clear cell histologic type are slightly at a higher risk of nodal spread (14). but it does not forecast the Clear cell adenocarcinoma having worse prognosis than squamous cell carcinoma in the absence of main risk factors (12). The data from the literature shows that in primary CCA of cervix, either radiation or radical hysterectomy and bilateral lymph node dissection results in cure rates of 85-90% for patients with small volume disease (13).

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