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Mesonephric Adenocarcinoma of the Cervix Can Be the Same as a Cervical Fibroid: A Case Presentation

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Abstract

Introduction: Mesonephric adenocarcinoma of uterine cervix is a rare variant of primary endocervical adenocarcinoma and a few cases have been reported previously. In fact in non-metastatic adenocarcinoma of the cervix, less than 5% possess mesonephric type. Because of the low incidence of mesonephric adenocarcinoma, various methods have been proposed for treatment of mesonephric adenocarcinoma. Nevertheless, there is no unity in treatment approaches.
Case Presentation: Here, we present a 45-year woman who had bloody discharge for 6 months period. Hormonal profile such as thyroid stimulating hormon (TSH) and prolactin was normal and all imaging studies showed a cervical fibroma as a mass. Abdominal hysterectomy -bilateral salpingectomy was performed. After pathologic report as a mesonephric adenocarcinoma, she received radiation and then she was candidate for bilateral oophorectomy.
Conclusions: Because of the diversity and an unusual appearance of mesonephric adenocarcinoma with aproblematic case of cervical mass, it is very important to consider mesonephric adenocarcinoma as a type of diagnosis. Numerous differential diagnoses should be considered for management of this type of carcinoma. In order to make a diagnosis, deep biopsy of infiltrative mass of uterine cervix, is mandatory.

Keywords: Mesonephric, Adenocarcinoma, Cervix

1. Introduction

Between the gynecological cancers, in terms of incidence and mortality cervical cancer is the third most common type of cancer in the United States, after endometrial carcinoma and ovarian carcinoma (1).

Histologically, 69 percent of uterine cervical cancer has squamous and 25 percent contain adenocarcinoma cell type (2). In fact in non-metastatic adenocorcinoma of the cervix, less than 5% possess mesonephric type (3). Malignant mesonephric tumors derived from remnants of the paired mesonephric (Wolffian) ducts. Due to limited cases of mesonephric adenocarcinoma of the cervix, no optimal management or prognosis has been reported so far. Some studies are suggesting a tendency for multiple recurrence and others, an associated aggressive clinical course (4-6). The clinical profile of adenocarcinoma of the cervix does not appear to differ from that of squamous cell cancer (7).

2. Case Presentation

We present a 45-year-woman who referred to our gynecology oncology center Valiasr hospital in Tehran University of Medical Sciences with a 6-months history of bloody vaginal discharge. She was gravida 3 and para 3, her past medical history was unremarkable. There was no significant problem in her family history. On the initial physical examination there was only asymmetric hypertrophic cervix, prominent in posterior lip without any ulceration. It was very difficult to make a diagnosis, as a cervix fibroid, and the vaginal sonography demonstrated endometrial thickness 6 mm with normal size uterus. There was a mass like lesion such as fibroid at the posterior lip of the cervix measuring 4 $\times$ 5 cm.

In another center, dilatation and curettage has been performed and pathologist reported proliferative endometrium and mild chronic cervicitis with squamous metaplasia. We have performed a cervical biopsy, reporting only mild chronic cervicitis with reactive atypia of epithelial cells. MRI reported cervical mass measuring 40 $\times$ 30 mm with mass effect higher on cervical canal. Lesion

enhancement is lesser than myometrium, no extension toward parametrium, vaginal canal and/ or uterus body. The patient underwent a simple abdominal hysterectomy and bilateral salpingectomy and ovaries were preserved because of the age of patient. She had a satisfactory post-operation course and discharged from hospital after three days. Following operation, the microscopic examination was mesonephric adenocarcinoma of cervix uteri with histologic grade: moderately to poorly differentiated and tumor size was 4.5 cm with depth of stromal invasion of 2 cm (Figure 1). The radial margin was free of tumor and distance of tumor from closest margin was 2 mm, but perineural and lympho vascular invasion was present. The vaginal cuff margin was free of tumor. One paratubal cyst and hyperplastic feature was also reported at the field as atypical endometrial hyperplasia. Because of the depth of invasion into stroma and lymphovascular space, adjuvant chemo radiation included external and internal radiation was accomplished, and no complications was observed after adjuvant treatment. Now, nine months after surgery, she is free from any indication of disease and candidates for second surgery for resection of ovaries.

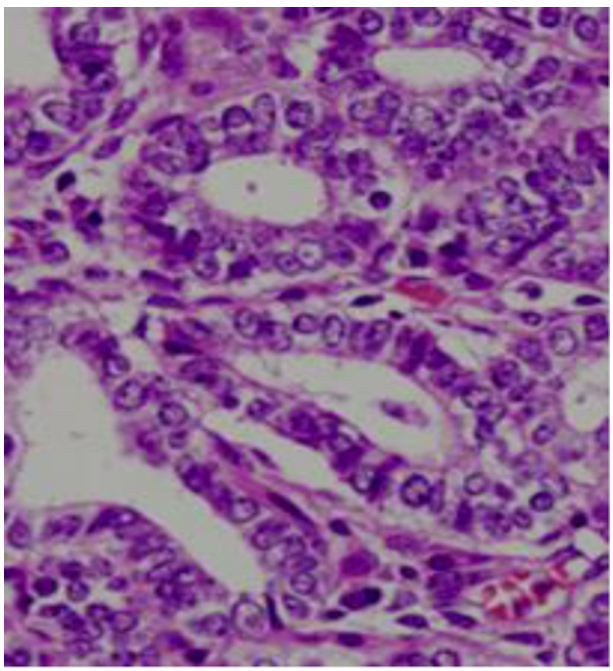

Figure 1. Moderately to Poorly Differentiated and Tumor Size Was 4.5 cm With Depth of Stromal Invasion of 2 cm

3. Discussion

In 1903 for the first time, mesonephric adenocarcinoma was described by Meyer as a tumor of uterine cervix apparent from remnant of mesonephric duct (8). The pathologic feature of mesonephric adenocarcinoma is varied and may include mullerian system and urogenital sinus (9). Differential diagnosis from other cervical carcinomas is difficult and limited information is known regarding to its biological behavior, prognosis, and the optimal management strategy (10).

Contrary to endocervical type adenocarcinoma, it has no relation with human papilloma virus (HPV) infection. Its diagnosis can be mistaken with other adenocarcinoma morphologically. In addition, it may have a better prognosis than mullerian counterparts. Mixture morphology is the difficulty of correct diagnosis in small biopsy specimen. Pathologists should consider this tumor very carefully as it shows various different morphologies (11).

Because of the rare report of such cases there is no unity in treatment approachesand various methods have been used for diagnosis or prognosis of mesonephric adenocarcinoma of the cervix (12). There is numerous differential diagnoses including adenoma malignum, endometrioid and clear cell adenocarcinomas, and mesonephric hyperplasia (13).

Mesonephric adenocarcinoma often is visible deep posterolaterally at the cervix. Our case was also located in the same position (4). The median age at diagnosis of cervical cancer in the United States from 2000 to 2004 was 48 years old (14). In mesonephric carcinoma, the age at diagnosis is 30 to 50 years, our patient was 45 as mentioned (15). Small cell carcinoma of the uterine cervix is the most common type, but especially in the younger age. The adenocarcinoma type of uterine cervical cancer has increased statistically in many reports recently (16). The most common symptom at presentation for cervical cancer is abnormal vaginal bleeding and post coital bleeding. Mesonphric adenocarcinoma is the same, at physical examination and imaging. Yap et al. reported in 25% of 26 cases, first diagnosis was in favor of cervical fibroid (15). The age and symptoms of our case are consistent with previous case reports at presentation and early stage of disease. It is important to accurately distinguish mesonephric adenocarcinoma from benign, proliferative mesonephric lesions. The latter encompasses a wide clinical and pathologic spectrum with some lesions resulting in clinical symptoms and displaying a diffuse hyperplastic process that may have a deep infiltrative appearance (17). It is hard to determine risk factors for the development of mesonephric lesions and carcinoma. The natural history of this unusual tumor remains uncertain with some

mesonephric adenocarcinomas displaying an aggressive clinical course. Several cases of metastatic disease and/or poor outcomes in the presence and absence of a malignant sarcomatoid component have been described. So, as suggested in previous reports, all recommendations for diagnosis of mesonephric adenocarcinoma uterine cervix, treatment option, root of surgery, indication of adjuvant therapy and follow up are similar to guidelines and protocols who described for usual histologic type of adenocarcinoma of the cervix according to clinical staging and pathological examination (15). According to suggestion of the gynecologic oncology group study #92 our patient, received adjuvant chemo-radiation therapy (18). In conclusion, because of the diversity and an unusual appearance of mesonephric adenocarcinoma, when there is no exact and definite diagnosis of cervical mass, rare histologic type such as mesonephric adenocarcinoma should be considered and it is important to perform deep biopsy of infiltrative mass of uterine cervix, in order to make an exact diagnosis. Because of the low incidence of mesonephric adenocarcinoma, there is various methods for treatment of mesonephric adenocarcinoma. Nevertheless there is no unity in treatment approaches.

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