Rare Papillary Serous Carcinoma in a Nigerian:
Case Report and Literature Review

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Abstract

Objective: To present a rare case of papillary serous carcinoma of the cervix and review the literature

Materials and methods: An illustrative case seen by the authors in a fifty-two year old Nigerian woman with stage III carcinoma of the cervix

Results: The clinical and pathological features of this rare tumour are discussed and compared with other cases already reported in the literature

Conclusions: Diagnosis of PSCC is based on the histological demonstration of a clear-cell papillary carcinoma in the cervix and the exclusion of an endometrial primary

Keywords: Cervix, Papillary, Carcinoma

Introduction

Primary adenocarcinomas of the cervix are uncommon (account for 5-15 % of all cervical cancers) and a cervical papillary serous carcinoma is exceptional [1,2,3]. The first detailed description of the tumour appeared in the work of Gilks and Clement published in 1992 1. Since then, only a couple of articles have appeared on the subject matter [2,3,4]. The small number of cases in the literature hampers understanding of the clinicopathological features of papillary serous carcinoma. There is no previously published report of this rare cervical neoplasm in a Nigerian, to our knowledge.

Case Report

A fifty-two year old woman, para 8+1 presented at the Gynaecology Clinic, Nigeria Army Base Hospital, Yaba, Lagos with a history of offensive vaginal discharge, lower abdominal pains and postcoital bleeding all of one year duration. She had attained menarche at 18 years of age and her menstrual cycle had been irregular K = 5 / 25. She was using contraception (Depo) and also the antihypertensive agent Aldomet.

Her admission BP was 130 / 80 mmHg and the PCV was 30 %. There was marked abdominal tenderness. Pelvic examination revealed an irregular and haemorrhagic growth arising in the cervix. She was subsequently subjected to examination under anaesthesia (EUA) and biopsy. This revealed a fungating, friable, necrotic cervical mass that extended to the lateral pelvic walls. Fractional curettage of the endometrium was done simultaneously. With the absence of tumour free space coupled with involvement of the lateral pelvic walls, an impression of stage III cancer of the cervix was made according to the modified FIGO staging system. The patient was transfused a pint of blood postoperatively. An irregular specimen measuring 1.2 x 1.0 x 0.8 cm was received in the laboratory for histopathological evaluation and diagnosis. The tissue was soft in consistency with brownish surface and cut sections showed areas of haemorrhage and necrosis. Microscopically, it is composed of an infiltrating tumour forming irregular glandular structures lined by proliferated epithelium. The neoplastic cells have moderate clear cytoplasm with central nuclei and prominent nucleoli ('hobnail' appearances). Numerous mitotic figures and foci of necroses are seen. The epithelial component masks a scanty and inflamed stroma within prominent papillae. Occasional psammoma bodies are noted.

The appearances are those of a papillary serous carcinoma of the cervix. The primacy of this di-

agnosis was confirmed upon thorough histological examination of the endometrial curetting, which ruled out cervical extension of a papillary serous carcinoma of the endometrium. The patient was accordingly referred for primary radiotherapy. Sadly, she is lost to follow-up at six months after presentation.

Discussion

Papillary serous carcinoma of the cervix (PSCC) is rare [3]. Reports on the involvement of the ovary, endometrium, the Fallopian tube and peritoneum with papillary serous carcinoma abound in the literature [5,6]. An interesting case was diagnosed in the ovary of a Nigerian child 7.

The presenting clinical manifestations of PSCC are abnormal vaginal bleeding, foul-smelling discharge and postcoital bleeding [1,2,4].

Majority of cases pursue an aggressive clinical course with early lymphatic permeation, regional lymph node involvement and extra-cervical spread [3,4].

The present patient, in keeping with the experience with most patients PSCC also gave a history of contraceptive use, but not maternal diethylstilboestrol DES. The former is related to clear cell carcinoma of the cervix and may not play any role in PSCC. Previous workers corroborate this [3]. Zhou et al had ascribed a bimodal age distribution to this tumour, which is not supported by independent observations [2,4]. A second histologic type of cervical carcinoma may be admixed with the PSCC. This is frequently a well-differentiated villoglandular adenocarcinoma, suggesting a relationship between the two entities, possibly a common aetiology [3]. Immunohistochemically, CEA and IC5 are consistently expressed and these are important in the differential diagnosis with an endometrial carcinoma that has extended to the cervix [8].

The outcomes of treatment modalities differ greatly among workers whose preferences range from surgical intervention alone or radiotherapy or a combination of the two. The best results have been obtained with combined radiotherapy and hysterectomy for stage I PSCC [3].

The important differential diagnoses are cervical spread of a papillary serous carcinoma of the endometrium (PSCE), papillary clear cell adenocarcinoma of the cervix and well-differentiated villoglandular adenocarcinoma of the cervix. Papillary clear cell adenocarcinoma of the cervix and PSCC share many clinical and histological characteristics. The former typically has hyalinised cores and a predominantly tubular, solid and cystic pattern that are uncommon or absent in PSCC [1,3].

Since PSCE is more common than PSCC a diagnosis of the latter must never be made until stage II PSCE has been excluded by the examination of endometrial curetting or hysterectomy specimen.

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