

Squamous cell carcinoma of the cervix simulating an advanced malignancy of the ovaries

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Summary

A 40-year-old woman was diagnosed as having stage II squamous cell cervical carcinoma and managed with radiotherapy. Three months after treatment, she presented with features suggestive of an advanced ovarian tumour including gross abdominal swelling, bilateral ovarian tumours, multiple tumour seedlings in the abdominal cavity and ascites. There was also pleural effusion. Operative findings revealed widespread intra-abdominal metastases whose histology, contrary to expectations, showed squamous cell carcinoma of cervical origin.

Distant metastases from squamous cell carcinoma of the cervix are rare. A high index of suspicion is necessary to detect this unusual mode of presentation.

Keywords: *Cervical carcinoma, distant metastases, ovarian tumour, diagnosis*

Résumé

Une femme de 40 ans a été diagnostiqué avoir un carcinome des cellules cervicales de troisième degré et a été soignée par radiothérapie. Trois mois après le traitement, elle a présenté les traits suggérant une tumeur ovarienne bilatérale, une tumeur multiple dans la cavité abdominale et ascite. Il y avait une effusion pleurale. Les observations opératives relevant un éparpillement des métastases intra-abdominales dont l'histologie, contrairement aux explications montrent un carcinome cellulaire aux origines cervicales. Les métastases distantes de squamous des carcinomes du cervix sont rares. Un grand indice de suspicion est nécessaire pour détecter ce mode inhabituel de présentation.

Introduction

Cervical cancer remains the commonest oncological problem in Nigeria women. The commonest presentation of carcinoma of the cervix is as abnormal vaginal bleeding and the tumour usually spread by direct extension of other organs. It is very unusual of this malignancy to present with an abdomino-pelvic mass.

This report is that of a patient with squamous cell carcinoma of the cervix who presented with an abdomino-pelvic mass which simulated a primary ovarian tumour.

Case report

Mrs H.A., a 40-year-old Para 6⁺¹ (6 alive) woman presented with three months history of vaginal bleeding and offensive, watery vaginal discharge. Examination under anaesthesia revealed an enlarged, exophytic, fungating and friable cervical growth with vaginal and bilateral parametrial and pelvic wall involvement. The tumour was

staged as a stage IIIB cervical carcinoma. Histology confirmed a poorly differentiated, large cell, non-keratinizing squamous cell carcinoma. She was managed with radiotherapy and completed the prescribed course of radiotherapy uneventfully.

Three months after radiotherapy, she presented with progressive abdominal swelling with occasional vomiting, dyspnoea and easy fatigability. Findings included left pleural effusion, gross ascites and solitary firm nodules in the pouch of Douglas. There were nodules in the rectovaginal space. A chest radiograph showed left pleural effusion for which the patient had closed thoracotomy tube drainage and subsequent pleurodesis. The haematological indices, electrolytes and urea, clotting profile and an intravenous urogram were all normal. Carcinoma of the ovary was suspected.

At exploratory laparotomy, findings included five litres of serous ascites, huge bilateral cystic ovarian masses (17 cm x 12 cm x 9 cm and 15 cm x 12 cm x 8 cm respectively), a six week sized uterus with tumour deposits on the ventral surface and the pouch of Douglas. There were huge metastatic masses on the omentum. There were multiple seedlings on the peritoneum and the undersurface of the right lobe of the liver. Salpingo-oophorectomy and partial omentectomy were done.

Histology of the ovaries and the omental mass showed extensively infiltrating nests and trabeculae of pleomorphic squamous epithelial cells not displaying obvious keratinization. The features were consistent with metastatic poorly-differentiated squamous cell carcinoma of cervical origin.

In view of the advanced nature of the disease and previous history of radiotherapy, the patient is being worked up for chemotherapy. She remains stable post-operatively without recurrence of ascites or palpable abdominal masses.

Discussion

The most common presentation of cervical cancer is abnormal vaginal bleeding. The natural history of squamous cell carcinoma of the cervix is that of primary spread by direct extension to adjacent organs [1] as well as embolization through lymphatic channels. Distant metastases are unusual. Carlson et al [2] found the occurrence of multiple organ metastases to be more common than single-organ occurrence [2]. Lung, bone and liver were the most frequently involved systems. A post-mortem study of patients with cervical cancer found the lung and liver to be organs most frequently involved, followed by the peritoneum and bone [3].

The patient presented here was initially diagnosed as a case of carcinoma of the cervix before developing features highly suggestive of primary malignancy of the ovary. As mentioned above, ovarian masses, pleural effusion and the gross surgical findings were also in keeping with this assessment until the histological diagnosis was made. Thus, this was atypical presentation which highlights the

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importance of a thorough evaluation of any patient with gynaecological cancer.

Features favouring metastatic [3] rather than primary independent ovarian carcinoma in patients with cervical carcinoma coexisting with ovarian tumours include bilateral ovarian tumours, similarity of histology in both tumours, extensive spread of cervical tumour, cervical tumour and commonly lymphatic and/or vascular invasion in either tumour [1]. Several of these features were present in the patient. The diagnostic problems posed by such a patient have recently been reviewed by Rawlings *et al* [4].

Treatment modalities for advanced or recurrent cervical carcinoma include extenterative procedure [5], post operative radiotherapy, radiotherapy alone and radiotherapy followed by adjuvant chemotherapy. Results of a recent Radiation Therapy Oncology Group study suggest that intra-operative radiation followed by external beam therapy improves local control, but provides no significant survival benefit [6]. Having completed a course of radiotherapy at the first presentation, we elected to treat the patient with systemic chemotherapy for the recurrence. Although chemotherapy for advanced/recurrent cancer has not shown great promise, response rates as high as 30% have been reported with cis-platinum based therapy [7]. In a phase II Gynaecological Oncology Group trial, Carboplatin was found to have similar activity with a 28% response rate [8]. However, whether systemic therapy will result in long-term survival in this particular patient remains uncertain.

In summary, this is the case of a 40-year-old patient who presented with an abdomino-pelvic mass, ascites, pleural effusion and multiple tumour seedlings in the abdominal cavity which turned out to be squamous cell carcinoma of the cervix rather than a primary ovarian neoplasm. The case illustrates the need for thorough evaluation of any patient with what may look like a classical textbook presentation of a particular tumour as in this case

carcinoma of the cervix, which may turn out to be a completely different tumour entirely.

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