

Small Cell Carcinoma of the Cervix: Report of Four Cases and Literature Review

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Abstract

Small cell carcinomas of cervix are uncommon and need to be individualized tumors from epidermoid owing to poor prognosis with their frequent occurrence of a hepatic metastasis and pulmonary. Similarly to small-cell cancers arising in other sites, it appears that regional therapy is not a sufficient treatment for this tumor. Chemotherapy should be used to improve outcome.

Keywords: Small cell carcinoma; Cervix; Metastases; Chemotherapy

Introduction

The small cell carcinoma is a rare tumor that occurs most often in the lung. Only 5% of cases are extrapulmonary localization. Regarding the female genital tract, reaching the cervix is the most common. Whatever the location, small cell carcinoma is an aggressive tumor with grave prognosis is related to the occurrence of systemic metastases early. We report four patients treated for small cell carcinoma of the cervix in order to study the various clinical, therapeutic and especially changing this condition.

Observations

Case 1

One patient of 42 years with no medical history presents with bleeding of average abundance. The examination found a tumor of the cervix stage IIIB, the biopsy showed a poorly differentiated tumor and immunohistochemical study retained the diagnosis of small cell carcinoma. The staging was normal (thoracic CT abdominopelvic and cerebral). The patient underwent external beam radiotherapy to 46 Gy associated with five courses of chemotherapy based etoposide 100 mg / m² j1 j2 j3 and Cisplatin 80 mg / m² day 1, followed by 24 Gy of brachytherapy course was marked seven months later by the appearance of liver metastases and adrenal. The patient received palliative chemotherapy and died five months later.

Case 2

A 40 year old woman consulted for menorrhagia, leukorrhea fetid and pelvic pain, clinical examination revealed a tumor of the cervix stage IIIB. Pathological examination with immunohistochemical study of the biopsy showed a small cell neuroendocrine carcinoma. The staging was normal. The patient benefited of radiotherapy of 70 Gy combined with four courses of concurrent chemotherapy based on cisplatin and etoposide. She died five months after the treatment with evolutionary pursuit of his illness.

Case 3

A small cell carcinoma of the cervix was found in a patient of 75 years four months prior to admission to an alteration of general condition and appearance of postmenopausal bleeding and hemoptysis. Clinical examination objectified a burgeoning ulcerative tumor 6 cm invading the vagina to its upper third and distal settings. Pathological examination with immunohistochemical study of biopsy-diagnosed. Staging revealed pulmonary and hepatic metastases. The patient

received a course of chemotherapy based on cisplatin and etoposide and died a month later.

Case 4

In one patient of 48 years with a tumor of the cervix stage IIB clinical examination, biopsy showed a small cell carcinoma with immunohistochemical study. The staging was normal. The patient received radiotherapy of 46 Gy and four courses of concurrent chemotherapy based on cisplatin and etoposide, followed by 24 Gy of brachytherapy with a decline of six months after the end of treatment, the patient is maintained in situation of locoregional control of the disease.

Discussion

The small cell carcinoma (CPC) was first described by Toker in 1972 [1]. The location at the cervix is less than 5% of cervical cancers and, if its evolution depends on the volume and tumor stage, her prognosis is bleak [2]. The clinical symptoms are quite similar to those found during conventional cervical damage. However, the CPC occurs most often at an advanced stage of evolution [3] as is the case in our observations. Some tumors may present with specific endocrine syndromes, but in most cases there is no clinical translation of these hormonal secretions.

The diagnosis is based on histological examination of tumor biopsy or resection specimen. The study objective microscopic sheets of small uniform cells with secretory granules presence of numerous 100 to 200 microns in diameter [4] with perinuclear microfilaments. The use of immunohistochemical study and the positivity of neuron-specific enolase, (NSE) may assist in diagnosis [4]. Before treatment a staging with a CT thoracic and abdominopelvic brain and a BOM must be made because of the aggressive and metastatic tumor of this type. Metastases usually occur in the lung, liver, brain and bone marrow. The rarity of the CPC of the cervix does not give precise rules regarding the treatment of this tumor. Overall treatment follows that of squamous cell carcinomas (radio-chemotherapy concomitant) [2]. The metastatic

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character willingly, immediately or at short maturity of these cancers encourages them closer to small cell lung carcinomas. An emphasis could be given as well to chemotherapy. And chemotherapy dose should be used not only cytotoxic but radiosensitising. Radiotherapy will be delivered at a dose of 46 Gy with an additional 24 Gy brachytherapy. When the number of chemotherapy regimens exists, they most often use the combination of cisplatin-etoposide [5-8], carboplatin, etoposide and cyclophosphamide, doxorubicin and vincristine. No protocol has demonstrated its superiority in terms of survival gain. Despite the high chemosensitivity to first-line chemotherapy, most patients relapse. In this case, second-line chemotherapy may be used. The use of oral chemotherapy maintenance is being developed [9,10]. The prognosis of small cell carcinoma of the cervix remains serious systemic metastases and early relapses after treatment.

Conclusion

The small cell carcinoma of the cervix is a rare tumor whose prognosis is severe with a high risk of early pulmonary and hepatic metastases. Treatment is difficult to codify it nevertheless follows that of squamous cell carcinomas: the concomitant radiochimiothérapie. The total dose chemotherapy is an important efficiency. Radiosensitivity is probably less than that of squamous cell carcinoma. This is the pathology and the serum markers used to aid in the diagnosis of metastases that unfortunately will confirm early.

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