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Case Report

Relapse of cervical cancer 12 years after the treatment

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ABSTRACT

Cervical cancer is the third most common gynecologic cancer in women and it remains one of the main causes of death. With rare exceptions, it results from an HPV infection and about 5% of this infection will culminate in the development of CIN 2 or CIN 3 lesions. After treatment with surgery or radiotherapy, 10 to 20% of the patients will have a relapse and/or metastases usually in the first two years after completing their treatment. In this article, we present a clinical case of a lymph node relapse 12 years after treatment in a 43-year-old patient with a microinvasive cervical cancer history, Figo stage IA1, without lymphovascular invasion.

Keywords: Cervical cancer, Relapse, Treatment relapse

INTRODUCTION

Cervical cancer is the third most common gynecologic cancer in women. It remains a leading cause of cancer-related death for women in developed countries. In countries that do not have access to cervical cancer screening and prevention programs, cervical cancer remains the second most common type of cancer and cause of cancer deaths among all types of cancer in women.¹

In 2010, according to the Portuguese Cancer Registry, the incidence rate was 8,9 per 100.000.²

In the 1990s epidemiology and molecular biology established a causal relationship between the persistent infection by high-risk Human Papillomavirus (HPV) and cervical carcinoma. HPV is central to the development of cervical neoplasia and can be detected in 99.7 percent of cervical smears. Although HPV infections can be transmitted non-sexually, most are due to sexual contact. The major risk factors for HPV infection are: early onset

of sexual activity; multiple sexual partners; promiscuity; history of sexually transmitted infections.³

A high percentage of sexually active women have or have had HPV infection. However, approximately 90% of these HPV infections are eliminated within a few months to a few years and without sequelae. On average, about 5% of HPV infections will culminate in the development of cervical intraepithelial neoplasia (CIN) 2 or 3 lesions within three years of infection.⁴

Other risk factors should be involved in the carcinogenesis process: type and duration of the viral infection- high risk HPV virus; host immunity; environmental factors- tobacco, vitamin deficiency; failure to perform the cervical cancer screening program.^{4,5}

Ten to 20% of the patients with cervical cancer treated with surgery or radiotherapy will have a relapse.⁶⁻⁹ The therapeutic decision should be based on the general condition, the site of the relapse and/or metastases, and

fundamentally the extent of the recurrent disease and the initial treatment.¹⁰⁻¹²

In this article we present a clinical case of a lymph node relapse 12 years after treatment in a 43-year-old patient with a microinvasive cervical carcinoma history, Figo stage IA1, without lymphovascular invasion.

CASE REPORT

Patient, 43 years old, with obstetrical history gesta 2, para 2, with one sexual partner. In October 2004, at age 31, she was submitted to a cone biopsy, due to a high-grade squamous intraepithelial lesion (HSIL). The cone piece showed an in situ squamous cell carcinoma with a microinvasion focus of less than 1 mm deep, associated with suggestive signs of HPV infection. The edges were free of disease. In December 2004 she was submitted to a total hysterectomy with appendages preservation. The histological examination showed no residual tumour.

Since then she had negative annual vaginal cytologies and no clinical evidence of neoplasia relapse.

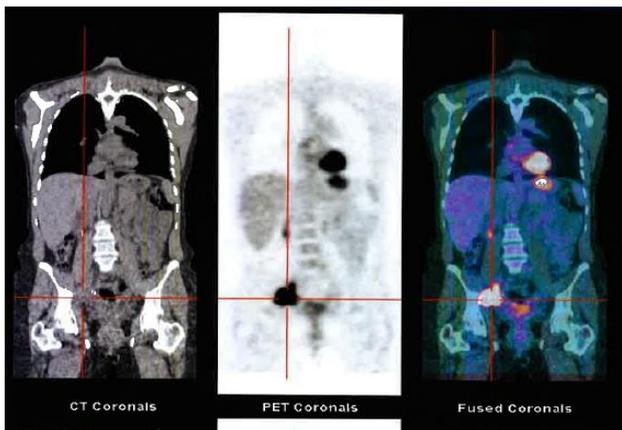


Figure 1: Pet: intense uptake in tissue densification in the right pelvic region.

In March 2016, during the study of a right lower limb deep venous thrombosis (DVT) a right iliac adenopathic conglomerate was diagnosed, which conditioned ureteral compression as well. The pelvic MRI showed a complex lesion with irregular contours in the planes corresponding to the right external iliac vascular axis, apparently by adenopathic confluence with maximum dimensions of 46 x 43 mm, involving the right external iliac artery, focally reducing its calibre in about 50% in its distal pre-femoral segment. This complex is also responsible for ureterohidronephrose, as evidenced by the dilatation of the right ureter with an average calibre of 12 mm. In the thoraco-abdominopelvic CT, the same findings were observed, showing a parenchymal thickness reduction of the right kidney due to the marked ureterohidronephrose, with a 22mm transverse diameter of the renal pelvis. This mass was palpated during the gynaecological examination. The vaginal cytology was negative for

malignant lesion (NILM) and the level of Scc was 8.5 ug/L. The mass biopsy showed aspects compatible with ganglionar relapse of epidermoid cell carcinoma. PET showed an intense uptake in tissue densification in the right pelvic region, next to the external iliac vessels; no other signs of metastatic disease were observed (Figure 1 and 2).

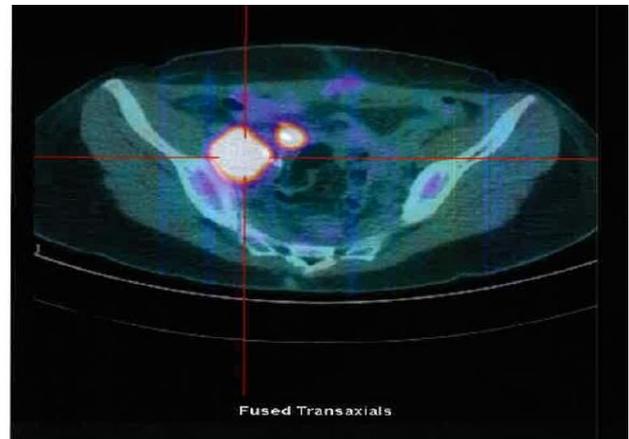


Figure 2: Pet: intense uptake in tissue densification in the right pelvic region.

Therefore, local radiotherapy- 45Gy, 5 times/week and a boost of 20 Gy 5 times/week - associated with 6 cycles of chemotherapy (cisplatin) was the proposed treatment. After the last session of radiotherapy, which occurred 3 months ago, the mass was still palpated during gynecological exam but its dimensions were reduced.

DISCUSSION

Cervical cancer relapse occurs in 10% to 20% of women, usually in the first two years after completing their treatment, and their prognosis is reserved.¹³ The three main metastatic sites are: pelvic ganglia, lung and liver.¹⁴⁻¹⁶ For the most part, metastatic cervical carcinoma is not curable. The prognosis becomes worse when the initial treatment was radiotherapy. However, when recurrent disease occurs in the pelvis (regional recurrence) or limited distance, surgical treatment may be potentially curative.¹⁶ In this case, the recurrence occurred 12 years after complete treatment which was cone biopsy followed by total hysterectomy in a FIGO stage IA1 cervical cancer without lymphovascular invasion.

As a consequence of local recurrence, the patient may show vaginal symptoms such as dyspareunia, blood loss or painful complaints. Vaginal involvement can be detected on gynaecological examination. Distance recurrence is usually associated with nonspecific symptomatology such as weight loss and anorexia, or according to the metastatic site. In this case, the recurrence was limited to the iliac ganglia, causing ureterohidronephrose and right DVT.¹⁶

Cervical cancer recurrence may be central pelvic, lateral pelvic or extra-pelvic.¹⁷ Central pelvic relapse develops from the cervix or vagina after radiotherapy or from the vaginal cuff after a hysterectomy. This relapse may be confined to the vagina or involve the bladder or rectum. Lateral pelvic relapse includes visceral pelvic disease. This relapse has originated in the paracervical area or in the scar of the paracervical resection.^{17,18}

The lymphatic spread begins in the cervical plexuses, then in the parametrials, to extend to the obturator ganglion, external and internal iliac groups. Only in the more advanced stages the common iliac ganglia and the para-aortic ganglia are involved, and from these, the dissemination through the thoracic duct may involve the supraclavicular ganglia. The lymph node invasion invariably occurs in this sequence.

The recurrent disease treatment will depend on the patient general condition, the site of the relapse and/or metastases, the recurrent disease extension and the initial treatment.¹⁰⁻¹² In situations in which the relapse is local and the initial treatment was a surgery, the most indicated therapeutic option is chemotherapy and radiotherapy. Regarding those patients who received radiotherapy as initial treatment, with pelvic relapse, there is a bleak prognosis. When patients have a more extensive disease, the only therapeutic option is chemotherapy.^{11,19,20}

CONCLUSION

Cervical cancer remains a major cause of gynaecological morbidity and mortality. The cervical cancer recurrence is a difficult challenge for the oncology gynaecologist. The treatment for patients with relapsed cervical cancer will depend on the patient general condition, the site of the relapse and/or metastasis, the recurrent disease extension and the initial treatment. This presented case is unusual due to early presenting stage as well as the temporal distance between initial treatment a relapse.

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