

Bone and brain metastases of endometrial carcinoma and its treatment with radiotherapy

Keywords: cancer, pelvic recurrence, lymph nodes, liver, adrenals, brain, bones, soft tissue

Introduction

Cancer of the uterine body is the fourth in worldwide incidence in women.¹ In developed countries, endometrial cancer is the fourth most common cancer in women.² Typical sites of recurrent and endometrial carcinoma include local pelvic recurrence, pelvic and para-aortic nodes, peritoneum and lungs. Atypical sites include extra-abdominal lymph nodes, liver, adrenals, brain, bones and soft tissue.³ Bone metastases with endometrial cancer are infrequent.⁴ Female genital tract cancers, are considered “neurophobic” since brain metastases from female genital tract cancers, apart from choriocarcinoma, are rare and usually develop as part of a widespread disseminated disease.⁵

Case report

A 55-year-old woman, with one previous gestation and a cesarean section, without other antecedents of importance. Began her current illness with abnormal vaginal bleeding in January and July 2015. She had curettage and biopsy on July 30, 2015, with a histopathological result of 2nd grade endometrial adenocarcinoma. She was treated with hysterectomy, bilateral ovarian resection and biopsies of the bladder, omentum and vagina, on August 20th, 2015, with a pathology result: moderately differentiated endometrioid adenocarcinoma of low grade according to binary classification, Invading the entire wall without reaching the serosa, with vascular and lymphatic invasion; Left parametrium with metastases, fragments of bladder with metastases, the rest without invasion.

Radiotherapy complete pelvic cycle, 50 Gy in 25 sessions with linear accelerator from September 28 to November 3, 2015. High dose brachytherapy 30Gy in 4 sessions, in November 5, 9, 12 and 17, separated by half a centimeter of the vaginal mucosa. 6 cycles of chemotherapy with carboplatin and paclitaxel. 3 cycles with cisplatin and doxorubicin. PET-CT of February 2017 with an increase in size and number of cervical, mediastinal, retroperitoneal, axillary and pelvic nodes; new lesions in bone, liver, lung; with increased uptake. Data on venous thrombosis in the pelvic limb. Lumbar thoracic osteoarthritis, renal cyst. She received tamoxifen 5 months. Presented right pelvic edema. Received 30 Gy radiotherapy in 10 sessions to the lumbar area and right pelvic inguinal zone in March 2-15, 2017, evolving with decreased pain.

She started monthly zoledronic acid; and also 3 cycles of Carboplatin AUC5, Paclitaxel 175mg/m² until May 2017, in which a CT scan of the skull, neck, thorax, abdomen and pelvis was found with: lesion in the left cerebral capsule of 19mm, left cervical adenopathy in the VA level of 30mm, pulmonary lesion of 16mm, lesion adjacent to the right internal iliac vein of 19mm, and result of us venous doppler with venous thrombosis at the level of common and superficial femoral and poplitea. The patient was sent to radiation

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oncology and angiology (Figure 1–3).

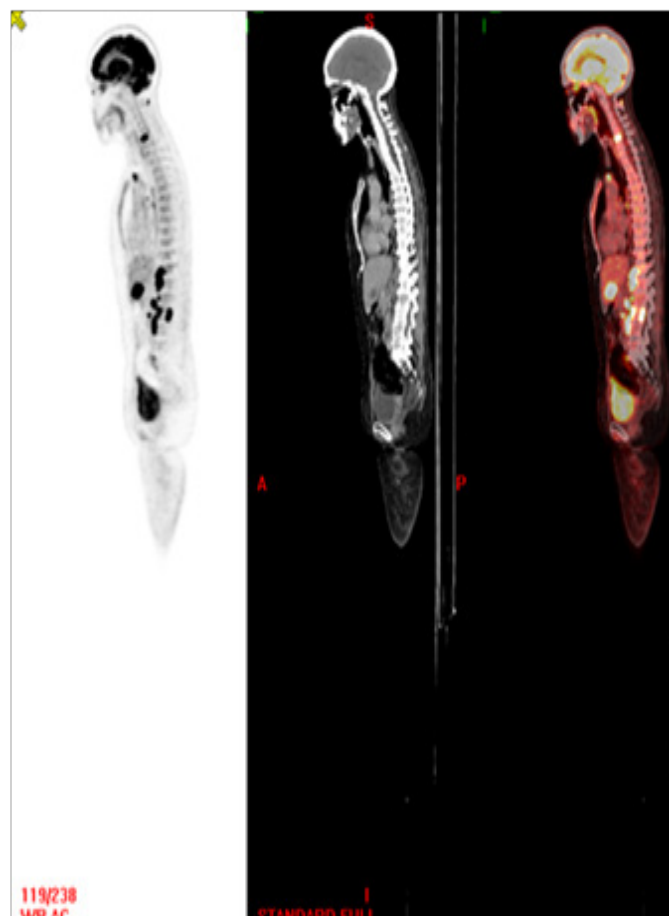


Figure 1 Sagittal positron emission tomography.

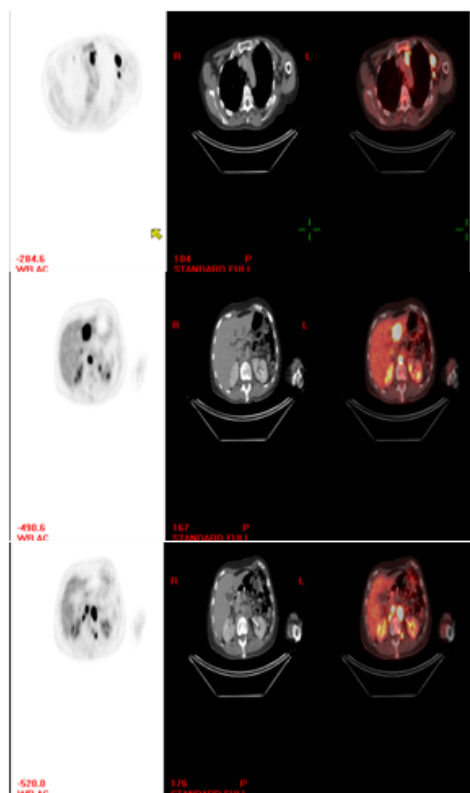


Figure 2 Axial PET-CT.

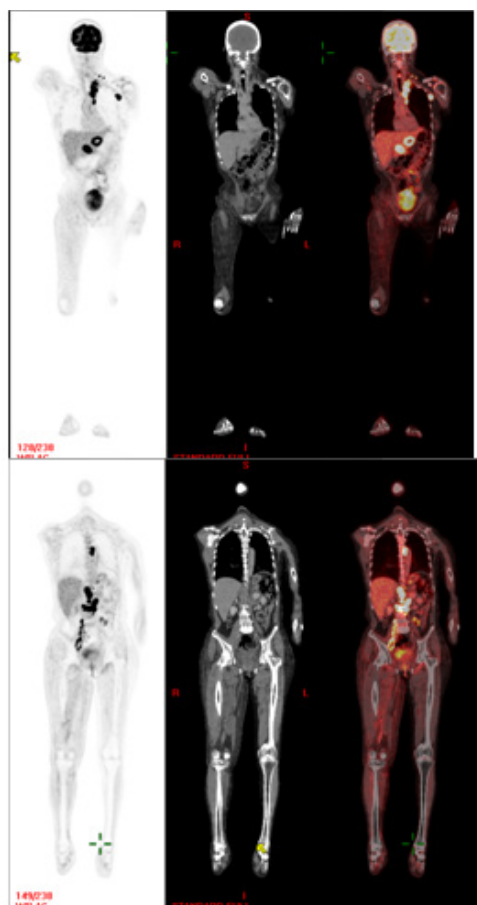


Figure 3 Coronal PET-CT.

Discussion

According to the literature, the patient had bone and cerebral metastases when the disease was very disseminated.⁵ Radiotherapy is a successful and time efficient method by which to palliate pain and/or prevent the morbidity of bone metastases. External beam radiotherapy has been the mainstay for the treatment of pain and/or prevention of the morbidity caused by bone metastases. Various fractionation schedules can provide significant palliation of symptoms and/or prevent the morbidity of bone metastases.⁶

Radiotherapy is capable of improving stability of osteolytic spinal metastases from gynecologic cancer by facilitating re-ossification. Patients who received chemotherapy prior to radiotherapy may require additional bone supportive treatment to overcome bone remodeling imbalance. Survival in women with bone metastases from gynecologic cancer remains poor.⁷ Radiation therapy has provided good results in more than half of the patients with bone metastases, with relief of pain and maintenance of quality of life in previous reports.⁸

The radiation dose to the osseous metastasis that the patient received had previously been proven effective in a RTOG study.⁹ The median survival after diagnosis of brain metastases from endometrial carcinoma was 5 months; however, a better survival has been achieved with multimodal therapy including surgical resection or stereotactic radiosurgery followed by whole brain radiotherapy and/or chemotherapy. The patient has been sent with the radiation oncologist.

Acknowledgements

None.

Conflict of interest

Author declares that there is no conflict of interest.

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