

## BRAIN METASTASES FROM ENDOMETRIAL CARCINOMA: REPORT OF THREE CASES AND REVIEW OF THE LITERATURE

Silvia Orrù<sup>1</sup>, Giancarlo Lay<sup>1</sup>, Marina Dessì<sup>1</sup>, Rita Murtas<sup>1</sup>, Maria Assunta Deidda<sup>1</sup>, and Maurizio Amichetti<sup>1,2</sup>

<sup>1</sup>Department of Radiation Oncology, A. Businco Regional Oncological Hospital, Cagliari; <sup>2</sup>ATreP (Agenzia Provinciale per la Protonterapia), Trento, Italy

**Aims and background:** Endometrial carcinoma is a rare cause of brain metastases, accounting for less than 1% of all metastatic lesions to the brain. This report aims to review our experience in the treatment of patients with brain metastases from endometrial carcinoma in order to establish the characteristics of these patients and evaluate the results and efficacy of whole-brain radiation therapy as a palliative measure.

**Methods:** Three cases of brain metastases from endometrial carcinoma treated with radiotherapy were identified in the files of the Division of Radiotherapy at the A. Businco Regional Oncological Hospital of Cagliari between 1999 and 2005.

**Results:** All patients had brain metastases as the only sign of systemic disease (a single lesion in 2 patients and 2 lesions

in 1 patient). Two patients were classified as RTOG RPA class I and 1 patient as class III. Radiotherapy to the brain was delivered after surgical resection in the first 2 patients and as the only method of palliation in the third patient. The delivered radiation dose was 3000 cGy in 10 fractions over 2 weeks in the postoperative setting and 2000 cGy in 5 fractions over 1 week to the patient treated with irradiation alone. The 2 surgically treated patients are alive and well after 16 and 64 months, respectively. The patient treated with palliative intent died 2 months after irradiation.

**Conclusions:** The combination of surgery and postoperative whole-brain irradiation in selected patients with solitary brain metastases from endometrial carcinoma is an effective method of palliation.

**Key words:** brain metastasis, endometrial tumor, radiotherapy.