Symptomatic leptomeningeal and intramedullary metastases from intracranial glioblastoma multiforme: a case report

Silvia Scoccianti¹, Beatrice Detti¹, Icro Meattini¹, Alberto Iannalfi¹, Angela Sardaro², Barbara Grilli Leonulli¹, Francesco Martinelli³, Lorenzo Bordi⁴, Gianni Pellicanò³, and Giampaolo Biti¹

¹Department of Radiotherapy, University of Florence, Florence; ²Department of Internal Medicine, Institute of Radiology, University of Bari, Bari; ³Department of Radiology, University of Florence, Florence; ⁴Department of Neurological Surgery, Careggi Hospital, Florence, Italy

ABSTRACT

Background. Glioblastoma multiforme infrequently metastasizes to the leptomeninges and even more rarely to the spinal cord. Moreover, very few patients with intracranial glioblastoma develop symptoms from spinal dissemination, with most patients not surviving long enough for spinal disease to become clinically evident.

Case report. We present a rare case of symptomatic diffuse spinal leptomeningeal metastases simultaneously to an intramedullary lesion from an intracranial glioblastoma multiforme. After the diagnosis of spinal metastases the patient was treated with limited-field spinal radiotherapy (30 Gy in 3-Gy fractions).

Results. Radiotherapy on the main spinal lesions provided either relief from pain or mild improvement of neurological deficits. The patient died due to intracranial progression 4 months after diagnosis of spinal seeding and 17 months after diagnosis of the primary disease. We analyzed leptomeningeal and spinal metastases from glioblastoma multiforme with reference to the literature.

Conclusions. Radiotherapy for spinal disease may provide important symptom relief but the prognosis of these patients remains dramatically poor. As the local control of primary glioblastoma multiforme has improved with recent therapeutic advances, distant metastasis from high-grade gliomas is likely to become a more common clinical problem and such patients need to be included in clinical trials to evaluate new therapeutic approaches.

Key words: glioblastoma, leptomeningeal metastases, radiotherapy, intramedullary metastases, metastases.

Correspondence to: Dr Silvia Scoccianti, Department of Radiotherapy, University of Florence, Viale Morgagni 85, 50134, Florence, Italy.
Tel +39-055-7947722;
fax +39-055-4379930;
e-mail silvia.scoccianti@unifi.it

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