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Hemorragic intra-medullary spinal metastasis of rectal tumor during treatment with bevacizumab

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Abstract

Strategies for the treatment of metastatic cancers have been modified with the advent of biotherapies. Bevacizumab, a humanized monoclonal antibody to human vascular endothelial growth factor (VEGF), is used in the therapy of colorectal, ovarian, renal and brain cancers [1]. It is an anti-angiogenesis agent and improves progression-free survival when combined with cytotoxic chemotherapy. These biotherapies have been associated with several side effects, notably gastrointestinal perforations, hypertension, proteinuria, thromboembolism or hemorrhage complications [2]. We describe patient with a hemorragic intra-medullary spinal metastasis of colorectal cancer (CRC) during treatment with bevacizumab.

Keywords

Anti-angiogenesis; Bevacizumab; Disease management; Colorectal cancer; Spinal cord; Metastasis.

Case Report

A 65-year-old man was hospitalized for tumor progression. He was undergoing for 20 months chemotherapy (irinotecan and 5 fluorouracile) combined with bevacizumab for metastatic (pulmonary and hepatic) rectal cancer (Lieberkühnien adenocarcinoma). Neurological examination was normal. Magnetic resonance imaging (MRI) showed a cervical hemorrhagic intra-medullary lesion with gadolinium enhancement (Figure 1). 18F-FDG PET/CT identified an intra-medullary uptake (SUVmax 7,6) (Figure 1), evoking an intra-medullary spinal metastasis (ISM). Given this systemic evolution, chemotherapy and bevacizumab were stopped and regorafinib was introduced. No specific treatment was initiated for the cervical ISM. Despite this the tumor progression persisted. Palliative care was retained.

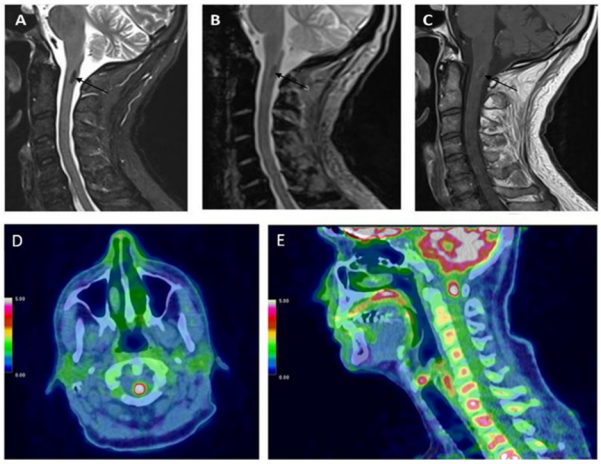

Figure 1: Sagittal cervical medullary MRI. STIR and T2*-weighted imaging sequences (A and B) reveal an intra-medullary lesion (C2) with hypointensity signal. T1-weighted imaging sequences with gadolinium (C) demonstrates intra-medullary enhancement (arrow). Fused FDG PET/CT axial (D) and sagittal (E) images showed intense and focal uptake within the spinal cord.

Central nervous system (CNS) toxicity of bevacizumab includes strokes (ischemic or hemorrhage) and intratumoral hemorrhage [3]. The risk of CNS bleeding ranges from grade 1, with no clinical significance, to grade 3, which requires discontinuation of treatment. Only data concerning cerebral metastasis are described [4]. ISM is an uncommon site of metastatic cancer. It is mainly described in lung and breast cancers. Recommended treatments include surgery and radiotherapy.

We retained a grade 1 intratumoral hemorrhage of an ISM during bevacizumab treatment for a metastatic CRC. Bevacizumab was stopped. This is the first description of a hemorrhagic ISM occurring during bevacizumab for a CRC. Furthermore, 18F-FDG PET/CT for ISM has never been previously reported.

Data availability statement: Data available on request due to privacy/ethical restrictions.

References

1. Ferrara N, Adamis AP. Ten years of anti-vascular endothelial growth factor therapy. Nature reviews Drug Discovery. 2016: 15: 385-403.

2. Genentech, Inc. Avastin prescribing information. 2016. Retrieved from https://www.gene.com/download/pdf/avastin_prescribing.pdf

3. Crino L, Dansin E, Garrido P, et al. Safety and efficacy of first-line bevacizumab-based therapy in advanced non-squamous non-small-cell lung cancer (SAiL, MO19390): A phase 4 study. Lancet Onco. 2010 11: 733.

4. Besse B, Le Moulec S, Mazieres J et al. Bevacizumab in patients with nonsquamous non-small cell lung cancer and asymptomatic, untreated brain mestastases (BRAIN): A nonrandomized, phase II study. Clin Cancer Res. 2001; 21: 1896.

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