



Worsening of cluster headache pattern associated with glioblastoma multiforme: a case report

Bruna Maria Cristino Oliveira¹, Beatriz Bagatim Bossa¹, Jean Carlos Bofi Rodrigues¹, Bruna Bobato Cortez¹, Marla Tahana Thompson¹, Luiz Henrique Parra Fenato¹, Camilla Stringuetta Galo¹, Joao Felipe Hermann Costa Scheidt¹, Aline Vitali da Silva²

¹Neurology resident, Hospital Evangélico de Londrina, Londrina, Paraná, Brazil.

²Professor, PhD, Pontifícia Universidade Católica do Paraná, Campus Londrina, Medicine School, Department of Medicine, Londrina, Paraná, Brazil.

Introduction

Cluster headache is the most common trigeminal autonomic cephalalgia, characterized by intense, unilateral headache accompanied by autonomic symptoms¹. The recommended investigation includes Brain Magnetic Resonance Imaging (MRI), which is expected to show no abnormalities. On the other hand, glioblastoma multiforme (GBM) is the most common and aggressive primary tumor in adults², with headache being an unusual presentation.

Objective

To present an unusual case of worsening cluster headache associated with the onset of GBM.

Case Report

An 88-year-old male patient attended the headache clinic at PUC-PR, Londrina-PR, complaining of very severe, right-sided, pulsating headaches, associated with facial flushing, tearing, and ipsilateral rhinorrhea, lasting between 15-20 minutes and occurring 2-3 times a day. The events were more frequent in the late afternoon and early morning and did not improve with common analgesics. He had been experiencing this pain for over 20 years; however, in the past year, it had become more frequent and unremitting. At the time of consultation, his neurological examination and fundoscopy examination were unremarkable. A brain MRI was requested, and an occipital anesthetic block was performed. Before the MRI was performed, the patient suffered a fall with head trauma and began to exhibit mental confusion. The MRI showed an expansive lesion located in the right occipito-temporal region with invasion of the splenium of the corpus callosum and water diffusion restriction measuring 4.5x2.7x4.0 cm, suggestive of GBM. The same examination also identified a subdural hematoma with a thickness of 2 cm. The patient subsequently underwent hematoma drainage. The family chose not to address the tumor lesion. After 4 months, the patient returned to the headache clinic, with his daughter reporting that since the anesthetic block, the patient had not experienced any headache episodes. Finally, 8 months after the initial consultation, the patient died.

Conclusion

Imaging studies are essential in trigeminal autonomic cephalalgias and should not be neglected despite long disease evolution and favorable response to implemented therapy.