POSTERIOR REVERSIBLE ENCEPHALOPATHY SYNDROME (PRES) AND ANTIANGIOGENIC INTRAVITREAL INJECTION?

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Introduction: Posterior Reversible Encephalopathy Syndrome (PRES) is a rare clinical-radiological entity described in 1996. It is characterized by a variable association between seizures, altered state of consciousness, headache, visual changes, nausea, vomiting, and focal neurologic signs. The imaging changes are symmetrical and predominate in the posterior white matter. Some cases are described in association with systemic administration of antiangiogenic drugs but only one case is associated with intravitreal administration (IV).

Methods: We describe the case of a 74 year-old patient with exudative macular degeneration in treatment with monthly IV bevacizumab.

Results: Twenty-four hours after IV bevacizumab, the patient developed aphasia and vomiting. The physical and laboratory examination was normal and cerebrospinal fluid examination ruled out meningitis or intracranial hypertension. A brain MRI revealed a large area of edema extending from the corpus callosum to the contralateral hemisphere area with mild contrast enhancement. Infectious, vascular and infiltrative causes of brain injury were excluded. The patient was admitted to the intensive care unit with gradual deterioration of neurological status, having developed marked cerebral edema with uncal herniation that resulted in death 3 days after admission.

Conclusion: Although there is a rationale for the development of PRES after IV bevacizumab, there is no proved association in this case. The risk can be attributed to the entry of the drug into the systemic circulation.