



PARTICULARITIES OF THE DIFFERENTIAL DIAGNOSIS OF HEMORRHAGE IN THE CEREBRAL INFILTRATIVE NEOPLASTIC PROCESS

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Introduction: Hemorrhagic stroke and cerebral infiltrative neoplastic hemorrhage are different clinical entities that require differential diagnosis for the correct management of the pathology and patient approach.

Purpose: To demonstrate that hemorrhage as a complication of cerebral infiltrative neoplastic process can imitate a hemorrhagic stroke, because of the existence of a similar clinical and paraclinical signs.

Material and methods: CT scan and MRI scan of a 53-year-old man



I 1. CT Scan - intracerebral hemorrhage in the right temporal lobe

I 2-3. MRI Scan with contrast agent

Keywords: hemorrhagic stroke, hemorrhage, infiltrative cerebral neoplastic process.

Results: A 53-year-old man, normotensive, who suffered a hemorrhagic stroke in the right temporal lobe and basal ganglia, who was treated with partial recovery of motor and sensory deficit. He was later hospitalized in the Neurology Department due to his aggravation of the clinical condition. He was investigated by brain MRI with visualization of a multifocal-polymorphic infiltrative neoplastic process with mixed component: tissue, necrotic and hemorrhagic content, located temporal on the right, with extension in the basal ganglia, imaging picture suggestive for primary tumor process, possibly multiforme glioblastoma or secondary metastatic process.

Conclusions: Noteworthy, 5–10% intracranial tumors cause intracranial bleeding which can be the first sign of a brain tumor. The intratumoral hemorrhage might be associated with both primary and metastatic brain tumor. Bleeding usually occurs in the course of highly malignant gliomas and affects 5–8% of patients with glioblastoma multiforme (GBM). The most important role in the etiopathogenesis are abnormalities of tumor vascularization. Both the microvascular proliferation with hiperplasya of endothelial cells following obliteration and the presence of numerous thin-walled, poorly formed or dilated vessels may cause hemorrhages. The newly formed vessels within the tumor mass are characterized by numerous structural abnormalities leading to their dysfunction.