Organized intracranial hematoma with bizarre edema
mimicking malignant brain tumor

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**Background:** Organized intracranial hematoma, also named chronic encapsulated expanding hematoma or encapsulated intracerebral hematoma, is not a common brain tumor which can be one complication after gamma knife radiosurgery (GKS) or medical history of head trauma. The symptoms and signs of this lesion usually develop gradually, could appear as a neurological deficit, seizures or symptoms associated with raised intracranial pressure. In many reported cases, most frequent finding on histological examination showed a vascular malformation. Herein, we report a patient who had neither neurosurgery nor head trauma history before where the initial image presentation showed massive perilesional edema mimicking malignant brain tumor.

**Case Description:** A 62-year-old female patient with past history of right hemifacial spasm for over 10 years was admitted due to impaired speech for two months. Slow speech and memory impairment were also found with regular outpatient follow up. Initial examination showed full muscle power and she could walk smoothly. There was no rigidity, resting tremor or other obvious neurological finding except right hemifacial spasm. Mini-Mental Status Examination (MMSE) and Clinical Dementia Rating (CDR) was arranged and the score were 17 and 2 respectively, which means moderate cortical dysfunction in MMSE with poor recalls in domain and mild dementia. Brain computerized tomography (CT) was done to rule out vascular dementia or stoke, which in turn, showed suspicious tumor growth at left cortico-subcortical region with marked perifocal edema and mass effect. Complete tumor marker survey was performed which revealed no abnormality. Transvaginal Ultrasonography, panendoscopy, abdominal echography, colonoscopy, breast sonography, chest and abdominal CT all revealed negative findings. Brain MRI
showed tumor growth at left cortico-subcortical region (post-central gyrus) with suspicious internal microcalcification and caused mass effect. The patient underwent craniectomy for removal of tumor on 2016/5/11. A 2x2x1.8cm, encapsulated, dark-reddish, rubbery tumor was found at left high parietal subcortical region, just behind the central sulcus. En bloc removal was done where gross total resection was achieved. Patient was sent to ICU after that and recovered without further complications. She was discharged one week later with improving language function and no further neurologic deficit. The final histological report was hematoma with organization.

**Conclusion:** Due to its relatively unusual and rare presentation in clinical and imaging studies, it takes time and also experience to be able to diagnose this disease before surgery. However, we shall always think of this as a differential and provisional diagnosis whenever we see similar images.