Management of brain tumor-related epilepsy: case report

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Abstract

Background: Patients with brain tumor related epilepsy present a complex therapeutic profile and require a unique and multidisciplinary approach. Difficulty in managing epilepsy in patients with brain tumors stems from an overall resistance to medical therapy, frequent interactions between antiepileptic drugs and chemotherapeutic agents, and potential adverse effects of both medical and surgical treatment. Moreover, seizures significantly impact the quality of life, and continued seizures are associated with a poorer outcome.

Material and methods: We present the case of a young adult patient with a brain tumor-related epilepsy.

Results: A 38-year-old woman was admitted to our hospital with focal motor seizures, with impaired awareness, evolving into bilateral tonicclonic. Her video-electroencephalogram monitoring revealed left temporo-frontal epileptiform discharges, frequently bilateral in wakefulness and sleepiness. Simple and contrasted magnetic resonance of the brain showed a lesion in the left temporal lobe. Patient began taking carbamazepine and levetiracetam, her seizures were partially controlled. A surgical resection was performed, and pathological analysis revealed anaplastic astrocytoma. Post-resection she has had a significant reduction in her seizures, and she is still taking antiepileptic drugs.

Conclusions: Patients with refractory epilepsy should be evaluated for potential epilepsy surgery. It is important to identify these patients early to limit the potential morbidity and mortality and to improve their quality of life.

Keywords: brain tumor-related epilepsy, refractory epilepsy, anaplastic astrocytoma.

Treatment of acute ischemic stroke by systemic thrombolysis combined with endovascular thrombectomy: case report

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Abstract

Background: A small number of acute ischemic stroke (AIS) patients meets eligibility criteria for systemic thrombolysis (ST) with recombinant tissue plasminogen activator, but its efficacy for large vessel occlusion is poor. Therefore, an increasing number of patients with large-vessel stroke are treated with endovascular mechanical thrombectomy (EMT).

Material and methods: We describe consequent events of our clinic's patient with AIS who underwent endovascular thrombectomy combined with thrombolytic therapy after conventional imaging – a brain non-contrast computed tomography (NCCT) and CT angiogram (CTA).

Results: A 51-year-old man was admitted in our clinic with signs and symptoms of a left middle cerebral artery (MCA) territory infarct. His National Institute of Health Stroke Scale (NIHSS) score was 22 on presentation and his brain NCCT showed left MCA M1 hyperdensity and Alberta Stroke Programme Early CT Score (ASPECTS) of 9. ST was initiated with door-needle time of 40 min and was ineffective. His CTA confirmed a left MCA distal M1 occlusion. Afterwards he successfully underwent thrombectomy, with a door-to-groin-puncture time of 120 min. His NIHSS score improved to 8 over the next 24 hours and he was discharged with NIHSS 4.

Conclusions: EMT seems to be a perfect option for patients with large-vessel stroke who did not benefit from ST. The presented case confirmed that early presentation and combined treatment with ST and EMT could be lifesaving options for patients with large-vessel stroke. **Key words:** acute ischemic stroke, systemic thrombolysis, endovascular thrombectomy.

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