A case of mitochondrial myopathy, encephalopathy, lactic acidosis and stroke-like episodes (MELAS) with psychogenic pseudoseizures

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Case Reports: Informed consent about the presentation in AOES was obtained from the patient. The patient was a 26 year-old man, who at 25 years suffered from generalized tonic-clonic seizures (GTCS). Based on the results of genetic analysis, he was diagnosed as having MELAS. At 26 years, he experienced dissociative disorders with the predominant symptoms being psychogenic pseudoseizures and manic episodes. The neurological symptoms were believed to be caused by the antiepileptic drugs phenobarbital and zonisamide. When these drugs were stopped, a slight improvement in the symptoms was observed. Nonetheless, interictal EEG showed spikes and high voltage slow waves (4-5 Hz) in the right central, parietal, mid-temporal and posterior temporal lobe. Brain CT revealed calcification of the bilateral basal ganglia. ¹H-MRS confirmed a reduced relative peak ratio in the right mesial temporal lobe, while interictal ⁹⁹mTc-HMPAO SPECT confirmed reduced blood flow in the cerebral cortex, particularly in the occipital and parietal regions. Because the patient was at risk of more GTCS, 300 mg/day of carbamaze pine was administered, and the patient's EEG abnormalities and neurological symptoms markedly improved. Conclusions: Although MELAS is associated with GTCS caused by organic factors, physicians should be aware that it can be accompanied by psychogenic pseudoseizures.

Pharmacotherapy and linguistic and behavioral therapeutic approaches to the patient showing the loss of verbal expression after status epilepticus

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It is not rare that epileptic patients have not only ictal events also the related neuropsychiatric manifestations. However the pharmacotherapy to treat both the ictal manifestations and psychiatric symptoms had relied on the experiential knowledge as usual. We treated an epileptic patient presenting hallucination and delusion. Administering haloperidol in addition to anticonvulsants we observed the intricate involuntary movement and speech disturbance similar to sensory aphasia after status. We changed the pharmacotherapy to atypical antipsychotic agent (risperidone), furthermore planed linguistic and behavioral therapy for the disorders of verbal expression and behavior. This time we present our case showing epileptic seizures, neuropsychiatric symptoms, peculiar involuntary movements and speech disorder, and intend to compare effectiveness of typical / atypical antipsychotic agents to epileptic seizure. Subjects and methods; Above-mentioned case (a 25-year-old man) and 3 epileptic patients with psychotic symptoms (one male, 2 females) as controls were selected and observed with time courses pharmacological responses, influences of the drug to seizures and their EEGs in addition compared mutually effects to neurological signs and therapeutic behavioral approaches. Our study was performed under the informed consent of patients and their families.

Results and comments; Psychiatric and behavioral disorders including speech disturbance recovered with our strategic rehabilitations and pharmacotherapy suggesting clinical processes via serotonin system as well as dopamine. We conclude that behavioral therapy to resolve epileptic patients' neuropsychiatric problems considering cognitive functions is useful.