Aphasic status epilepticus caused by Transient ischemic attack or viral infection

M. Kekenadze, M. Beridze, N. Kvirkvelia, T. Losaberidze, O. Samushia, M. Khaburzania, G. Chakhava

Tbilisi State Medical University, Tbilisi, Georgia

Aim

The present study described the case of the Aphasic Status Epilepticus in a 58-year-old right-handed female who presented the sudden onset of aphasia after the high hypertensive episode (T/A –180/100mmHg).

Introduction

Aphasia often develops during stroke and TIA. Though, the presence of Broka's aphasia as the sole manifestation of partial status epilepticus on the background of TIA is a very rare case.

Anamnesis Morbi: Patient never had the Epileptic seizures. Twenty eight years ago after giving birth for son, she developed speech difficulty that was lasted during one day and resolved by itself . The episode was considered as the neurotic reaction.

No –Diabetes; No –Heart disease. No-Hypertension Disease.

Patient developed hypertension episode due to stress at working place and was taken to hospital.

Methods and Materials

Neurological Examination: Patient was drowsy, expressive speech strongly disturbed, moderate rigidity in both upper extremities, predominantly in the right hand. Motor function preserved in all extremities. Slight dysmetria and reflex increase in right extremities, Babinski sign bilaterally positive. Sensation –normal.

Brain Conventional CT- Normal.

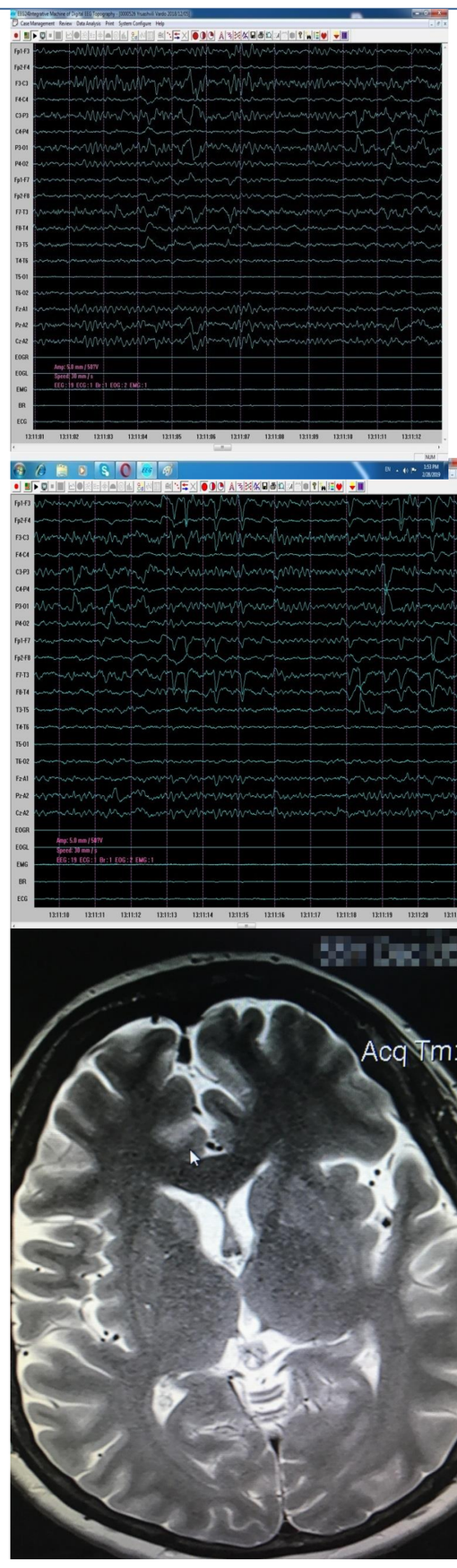
Brain conventional MRI(1.5T)-Normal.

Transcranial Doppler- significant spasm in basilar artery **(blood flow velocity- 77 against 40±10 (cm/sec), p<0.05)**

ELISA	Analysis	Result	Acceptable range
Epstein Barr virus	Ig G	4.8	0.8-1.1
Epstein Barr virus	Ig M	0.5	0.8-1.1
borrelia burgdorferi	IgG	0.82	0.8-1.1
borrelia burgdorferi	IgM	0.6	0.8-1.1

CSF (4ml)	analysis	Result	Acceptable range
Visual examination	Colorless	Clear	Gravity-1015
Protein	g/l	0.49	0.15-0.45
Glucose	mmol/l	3.95	2.22-4.44
Cytosis	Leu/µL	85/3	<5
Leukocyte Erythrocyte	Native smear	14-16 10-12	Visual field

Results



EEG showed diffuse dysrithmia, bilateral sharp wave activity, focal changes in the left fronto-centro-temporal areas with epileptiform patterns.

Discussion

Aphasic status epilepticus is a very rare condition that was previously reported in relation with stroke, multiple sclerosis, head trauma etc.

In present case visualization did not prove any injury to brain but the CSF showed the signs of viral infection.

It can be supposed that the viral infection resulted in hypertensive episode and TIA that triggered the cortical spreading depression in the brain tissue.

The focal functional changes in left fronto-centro temporal area showed the synchronized sharp wave and slow wave Q activity.

Conclusions

According to the present study, it can be supposed that TIA can become the cause of Aphasic Status Epilepticus in certain patients.

References

1. Albert ML, Helm-Estabrooks N. Diagnosis and treatment of aphasia. Part I. JAMA. 1988;259:1043–1047. doi: 10.1001/jama.1988.03720070043032.
2. Kertesz A. Clinical forms of aphasia. Acta Neurochir Suppl (Wien) 1993;56:52–58. doi: 10.1007/978-3-7091-9239-9_9.
3. Kanemoto K, Janz D. The temporal sequence of aura-sensations in patients with complex focal seizures with particular attention to ictal aphasia. J Neurol Neurosurg Psychiatry. 1989;52:52–56. doi: 10.1136/jnnp.52.1.52. [
4. Grimes DA, Guberman A. De novo aphasic status epilepticus. Epilepsia. 1997;38:945–949. doi: 10.1111/j.1528-1157.1997.tb01262.x. [
5. Wells CR, Labar DR, Solomon GE. Aphasia as the sole manifestation of simple partial status epilepticus. Epilepsia. 1992;33:84–87. doi: 10.1111/j.1528-1157.1992.tb02286.x.