



Isolated Apraxia and Motor Impersistence of Eyelid Closing Associated with Multiple Cerebral Infarctions

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Apraxia of eyelid opening is a well-known and occasionally observed condition in the hemispheric lesions. However, apraxia of eyelid closure, which is characterized by difficulty in voluntary eyelids closing with normal blinkings, is very rare. We report a patient with moyamoya disease who developed eyelid closing apraxia accompanied by motor impersistence. Brain magnetic resonance imaging study showed recent infarctions in the bilateral frontal lobes and the right basal ganglia. The lesion of the bilateral frontal lobes was suggested to be responsible for the apraxia and motor impersistence of eyelid closing.

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Key Words: Eyelid closing apraxia, Cerebral infarction

(motor impersistence)
[2,3]. (lid
(isolated disturbance opening apraxia)
of voluntary eye movement) 가 [4,5].
, (cortical ptosis), 가 가
(motor impersistence) 가 (lid closing apraxia),
가 [1]. [6], [7],
(apraxia), [7]
[3].

.....

: [3,7].
134

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19 가 3
 . 5
 2 가
 1 PTU (Propylthiouracil)
 가 3
 가 12
 가 2
 128/61 mmHg, 80 (neglect) (extinction)
 가 (ESR), C- (CRP) 가
 가 (, ,), pro-
 가 protein C, protein S . Fibrinogen 356
 mg/dl , homocysteine 12.1 μ mol/L
 가 . Antithrombin III 125% 가
 가 fibrinogen degradation products D-dimer
 free T4 2.4 ng/dl(
 가 0.73-1.95) 가 (TSH)

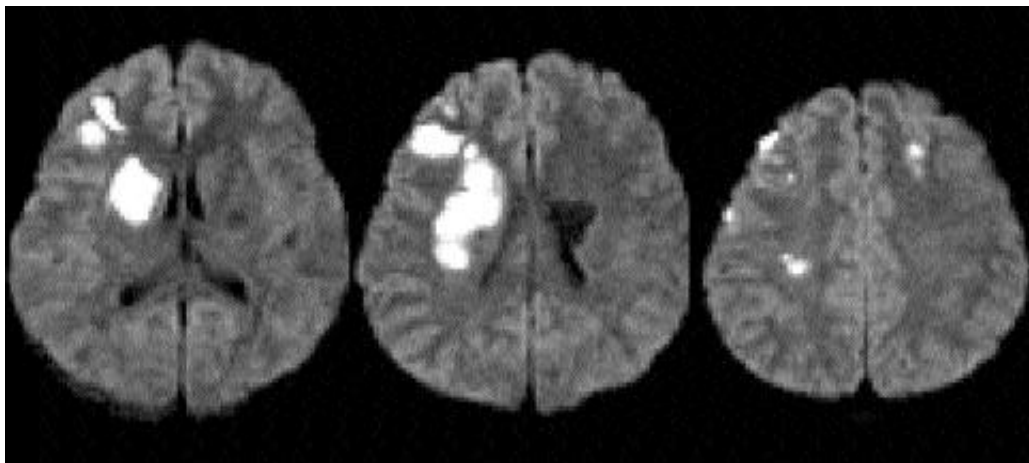


Figure 1. Magnetic resonance Imaging (MRI) of the patient. Brain MRI showed recent infarctions in the bilateral frontal lobes and the right basal ganglia.

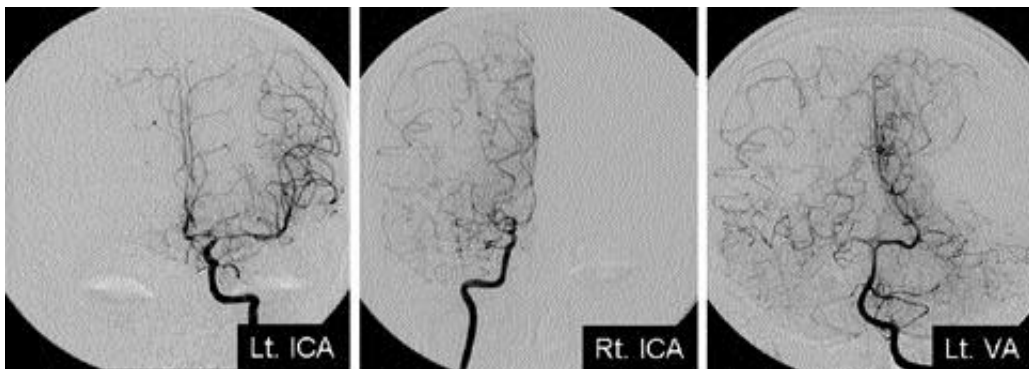


Figure 2. A conventional angiography shows an occlusion or severe stenosis in proximal portions of the bilateral middle and anterior cerebral arteries, with leptomeningeal collaterals. ICA=internal carotid artery, VA=vertebral artery.

0.17 μU/ml(0.34-3.5)
 thyroglobulin <1.5ng/ml(<60), T3 214.5
 ng/dl(80-220)

(rolandic operculum)
 [3,7,9,13].

(Fig. 1).

[6,7].

(Fig. 2).

(disconnection syndrome) [12]

20 (23)

가 [14]

(phasic inability)

가

[2,7].

(supranuclear disinhibition)

(Muller's [8].

muscle)
 (tarsal plate)

가

가

가

가

가

가

가

가

8 4,

(cingulate gyrus),

(pre-

central gyrus)

REFERENCES

- 1) Saring W, von Cramond. Disorders of voluntary eyelid movements. *Fortschr Neurol Psychiatr* 1982;50:127-132.
- 2) Rosati G, De Bastiani P, Granieri E, Agnetti V. Voluntary lid closure inability. Release of a compulsive reaction to the exploration of the environment. *Arch Psychiatr Nervenkr* 1978;226:11-17.
- 3) Hamano K, Kimura S, Miyao S, Teramoto J. Apraxia of eyelid closure complicating right parietal infarction. *European Neurology* 2001;45:122-124.
- 4) Kaiboriboon K, G. R. Oliveira, E. C. Leira. Apraxia of eyelid opening secondary to a dominant hemisphere infarction. *J Neurol* 2002;249:341-342.
- 5) Boghen, Dan. Apraxia of lid opening: A review. *Neurology* 1997;48:1491-1494.
- 6) Russel RWR. Supranuclear palsy of eyelid closure. *Brain* 1980;102:71-82.

[8].

1907 Lewandowsky
 [9].

[10,11,12],

[8].

- 7) Lessel S. Supranuclear paralysis of voluntary lid closure. *Arch Ophthalmol* 1972;88:241-244.
- 8) Lepore F. So-called apraxias of lid movement. *Adv Neurol* 1988;49:85-90.
- 9) Lewandoswsky M. Ueber apraxie des lidschulusses. *Berl Klin Wochenschr* 1907;44:921-923.
- 10) Kertesz A, Nicholson I, Cancelliere A, Kassa K, Black SE. Motor impersistence: a right hemisphere syndrome. *Neurology* 1985;35:662-666.
- 11) De Renzi E, Gentilini M, Bazolli C. Eyelid movement disorders and motor impersistence in acute hemisphere disease. *Neurology* 1986;36:414-418.
- 12) Ghika J, Regli F, Assai G, Bogousslavsky J. Inability to voluntarily close the eyes. Discussion of supranuclear disorders in palpebral closure based on 2 cases, with a review of literature. *Schweiz Arch Neurol Psychiatr* 1988;139:5-21.
- 13) Colombo A, De Renzi E, Gilbertoni M. Eyelid movement disorders following unilateral hemispheric stroke. *Ital J Neurol Sci* 1982;3:25-30.
- 14) Dehen H, Cambier J. Failure of voluntary eyelid closure, motor impersistence and hemispheric functional specialization. A report on 3 cases. *Rev Neurol(Paris)* 1979;135:573-582.