

A Case of Acute Motor Axonal Guillain-Barré Syndrome combined with Acute Cervical-Upper Thoracic Transverse Myelitis

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- Abstract -

Guillain-Barré syndrome(GBS) is a common demyelinating disease of the peripheral nervous system. But recently, the axonal types are also reported. Acute transverse myelitis(ATM) is also a common inflammatory disease of the spinal cord. Generally, it is difficult to identify the etiology of GBS and ATM. I guess the occurrence of the 2 diseases at once is hard to take the place.

A 63-year-old woman showed an acute motor axonal GBS and a cervical-upper thoracic ATM occurring at the same time. She was treated by intravenous immunoglobulin and solumedrol therapy. Her sensory symptoms were improved rapidly but motor symptoms showed only mild improvement.

Key Words : Guillain-Barré syndrome, Acute transverse myelitis

GBS) (Guillain-Barré syndrome, 63 GBS
 GBS ATM
 ATM) (acute transverse myelitis, 63 가 5 가
 가 GBS ATM
 가

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 가
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11 가

가

4/5, 2-3/5 가

가

(magnetic resonance imaging, MRI)

2 가 1/5

가 38 가

3 (compound muscle action potential, CMAP)

50% H F 가

가

(conduction block) (temporal dispersion) CMAP

7/mm³ 104 mg/dl IgG index oligoclonal band (intravenous immunoglobulin, IVIG)

GBS 38

5

9 4

Foley CMAP H F 가

GBS



Figure 1. T2-weighted sagittal image reveals a poorly marginated area of increased signal intensity in the spinal cord at C3 and 4 level about 2 cm in length. Diffuse subtle increased signal intensity is also seen around the lesion from C2-3 level to T1 level. Gd-enhanced image also reveals a poorly marginated area of Gd-enhancement at C3 and 4 level.



Figure 2. T2-weighted axial image reveals increased signal intensity in the central area of the spinal cord.

GBS

IVIG

IVIG

MRI 가 12

MRI 가

(Fig.

1, 2) solumedrol (fecal)

가 ATM 가 가 5,8

18

2

가 가

MRI

MRI

4.5/5

2-7

3/5

MRI

CMAP 50%

H F 가

H F GBS (anterior horn cell) (antidromic) (motor neuron) 1~5% (discharge) (excitability) F (persistence)

F 가

F 가

F H

가

ATM

F 가

63

9,10

가 가

가

IVIG

H F 가 ATM GBS GBS ATM

GBS

가

CMAP 80%

가 GBS

(spontaneous activity) (paraspinal muscle)

(spontaneous activity) (paraspinal muscle)

가 , ATM 가

GBS

5,8

1,6-8

가

38

4

가

IVIG

GBS ATM

X ,

가 .

1. .
2000;2:1-7.
2. McKhann GM, Cornblath DR, Griffin JW, et al. Acute motor axonal neuropathy: a frequent cause of acute flaccid paralysis in China. *Ann Neurol* 1993;33:333-342.
3. Griffin JW, Li CY, Ho TW, et al. Guillain-Barré syndrome in northern China: the spectrum of neuropathological changes in

- clinically defined cases. *Brain* 1995;118:577-595.
4. Griffin JW, Li CY, Ho TW, et al. Pathology of the motor-sensory axonal Guillain-Barré syndrome. *Ann Neurol* 1996;39:17-28.
 5. Victor M, Ropper AH. *Principles of Neurology*. 7th ed. New York: McGraw-Hill. 2001;1304-1315, 1380-1387.
 6. Ho TW, Li CY, Cornblath DR, et al. Patterns of recovery in the Guillain-Barré syndrome. *Neurology* 1997;48:695-700.
 7. Peter Bosch E, Smith BE. Disorders of peripheral nerves. In: Bradley WG, Daroff RB, Fenichel GM, Marsden CD. *Neurology in Clinical Practice*. 3rd ed. Vol. 2. Boston: Butterworth Heinemann. 2000;2079-2086.
 8. Shields RW, Wilbourn AJ. Demyelinating disorders of the peripheral nervous system. In: Goetz CG, Pappert EJ. *Textbook of Clinical Neurology*. Philadelphia: W.B. Saunders Company. 1999;992-997.
 9. Syme JA, Kelly JJ. Absent F-waves early in a case of transverse myelitis. *Muscle Nerve* 1994;17:462-465.
 10. Marras C, Midroni G. Transient absence of F-wave in acute myelopathy: a potential source of diagnostic error. *Electromyogr Clin Neurophysiol* 2000;40:109-112.