A case of the Churg-Strauss syndrome

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Case report

The patient was a 55-year-old woman.She had suffered bronchial asthma from 2005.She noticed numbness inboth lower extremities, and a pain from the end of May, 22.Because the symptoms progressed untilthe middle of June, she attended Tokushima National Hospital.The distalis predominance of both lower extremities included sensory disturbance (a pain including a tingling ache) and muscle weakness.As for the deep tendon reflexes, the Achilles reflex disappeared.The white-blood cell count (WBC) was 5060 /μl(neutrophils, 47.0%; lymphocytes 36.8%;eosinophil 9.3%),CRP <0.1mg/dl, blood sugar 95 mg/dl, HbA1c 5.5%,AST 13 U/L,ALT 10 U/L, CK 37 U/L, TSH 3.32μIU, FT3 3.4 pg/ml, FT4 1.4 ng/ml.Rheumatoid factor (RF) rose with 122 mg/dl.Axonopathy was found in a large number of nerves during anerve conductionexamination (Table).

Table. Nerve conduction study

Nerves		Right(R) /left (L)	Distal Latency (msec)	Amplitude	Conduction velocity (m/sec)
Motor	Median nerve	R	4	13.5 mV	57.1
	Peroneal nerve	L	4.4	0.448 mV	40.0
		R	4.9	0.309 mV	31.1
	Tibial nerve	L	3.7	3.3	39.2
		R	not evoked		
Sensory	Median nerve	R	2.6	32.6 μV	70.2
	Sural nerve	L	2.6	2.2 μV	47.8
		R	2.6	1.0 μV	52.1

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Discussion

Churg–Strauss syndrome (also known as "Allergic granulomatosis" [1]) is a form of medium and small vessel autoimmune vasculitis, leading to necrosis. It involves mainly the blood vessels of the lungs (it begins as a severe type of asthma), the gastrointestinal system, and peripheral nerves, but also affects the heart, skin and kidneys. It is a rare disease that is non-inheritable and non-transmissible. Churg–Strauss syndrome was once considered a type of polyarteritis nodosa due to the similar morphologies of the diseases.The American College of Rheumatology 1990 criteria for diagnosis of Churg-Strauss Syndrome lists the following criteria: asthma, blood eosinophilia >10%, Presence of mononeuropathy or polyneuropathy, non-fixed pulmonary infiltrates, presence of paranasal sinus abnormality and histological evidence of extravascular eosinophils. For classification purposes, a patient is said to have Churg-Strauss syndrome (CSS) if at least four of these six criteria are positive. The presence of any four or more of the six criteria yields a sensitivity of 85% and a specificity of 99.7% [1]. The present patient fulfilled the criteria.

References

1. Masi AT, Hunder GG, Lie JT, et al. "The AmericanCollege of Rheumatology 1990 criteria for the classification of Churg-Strauss syndrome (allergic granulomatosis and angiitis)". Arthritis Rheum. 1990, 33: 1094–100.