Isolated Shoulder Palsy due to a Cortical Infarction

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Picture 1.

A 75-year-old man with hyperlipidemia suddenly presented with difficulty in lifting his left arm, despite the lack of shoulder pain. Moderate weakness restricted to the left shoulder with normal joint flexibility was observed, despite normal muscle strength in the elbow, wrist and fingers. There were no other neurologic abnormalities. Shoulder magnetic resonance imaging (MRI) findings were normal. Cranial MRI (Picture 1A, B: diffusion-weighted image, Picture 1C, D: T2-weighted image) demonstrated a small infarction in the right precentral gyrus (arrow). Electrocardiogram, echocardiogram, and carotid ultrasonography demonstrated normal findings. Because atherothrombosis was considered, intravenous ozagrel sodium was initiated. Thereafter, he became asymptomatic within 10 days.

In the primary motor cortex, there is a broad somatotopic

representation of the different body parts in an arranged order, and the area corresponding to the shoulder is very small. Therefore, to date there are only 2 reported cases of isolated shoulder palsy due to a cortical infarction detected by diffusion-weighted MRI (1, 2).

The authors state that they have no Conflict of Interest (COI).

References

1. Nah HU, Park HK, Kang DW. Isolated shoulder weakness due to a small cortical infarction. *J Clin Neurol* 2: 209-211, 2006.
2. Komatsu K, Fukutake T, Hattori T. Isolated shoulder paresis caused by a small cortical infarction. *Neurology* 61: 1457, 2003.