P-22 Choreo-athetosis in the lower limb following an infarct in the area of corona radiata

Yui Takeuchi^a [Other Doctors], Osamu Hamada^a, Mori Nakai^a, Shintaro Kosaka^a, Koji Sowa^b

^a Department of General Internal Medicine, Nerima Hikarigaoka Hospital,

^b Department of Neurology, Nerima Hikarigaoka Hospital

Introduction

Involuntary movements following stroke are relatively common (0.08%). Hemichorea following stroke have been reported. However, monochorea are rarely reported. Here, we report a patient who presented with left lower limb choreo-athetosis secondary to ischemic stroke.

Case Presentation

A 68-year-old Japanese man presented with sudden onset of involuntary movements in the left leg of two days duration. Thereafter, the symptom persisted and he developed difficulty walking due to involuntary movements. Therefore, he visited ED of our hospital. Past medical history included hypertension and dyslipidemia. He did not take any medications.

On physical examination, vital signs showed blood pressure of 135/90 mmHg, heart rate of 98/min, respiratory rate of 12/min, body temperature of 36.8°C and GCS was E4V4M6. On neurological examination, cranial nerves II to XII testing were intact. Manual muscle testing was 5/5 throughout. Sensations to tactile and pain were intact. Deep tendon reflexes were normal and Babinski reflex was negative. There were slow, irregular, rhythmic involuntary movements in his left leg. The remainder of the examination was normal.

Laboratory dates were non-contributory and electrocardiogram showed normal sinus rhythm. CT of the head showed low density in right corona radiata area. MRI of the brain showed the findings of acute ischemic stroke in the same area. The patient was diagnosed as ischemic stroke. Aspirin and atorvastatin were initiated. His symptom disappeared gradually.

Discussion

In case reports with choreo-athetosis following stroke, the site of pathology was thalamus, subthalamic nucleus, putamen, pallidum, midbrain tegmentum. There are nerve fibers through the corona radiate from basal nuclei to cerebral cortex. In this case, due to an infarct in the area of corona radiata, these fibers might be interrupted.