Response to Letter Regarding Article, “Damage to the Left Precentral Gyrus Is Associated With Apraxia of Speech in Acute Stroke”

We appreciate the letter by Terao et al1 on our recent publication.

The posterior wall of the precentral gyrus corresponds to the primary motor cortex or Brodmann’s area 4 at its mid to dorsal parts and to the premotor cortex or Brodmann’s area 6 at its ventral part. The region associated with apraxia of speech in our study, which is located at the middle part of the precentral gyrus, presumably corresponds to the primary motor cortex. As Terao et al pointed out, the functional asymmetry of the motor cortices is an intriguing research theme. Although the role of right hemisphere structures in speech production was not directly investigated in our study, the accumulated evidence in clinical neurology clearly indicates that apraxia of speech arises from the dominant hemisphere damage in people with typical functional lateralization of the brain. Crossed apraxia of speech is a rare symptom.2 Future lesion-symptom mapping studies on a variety of oro-facial motor disorders, including bucco-facial apraxia, Foix–Chavany–Marie syndrome, and dysphagia, may provide important insights on this issue.

Disclosures
Dr Itabashi received honoraria for oral presentations from Otsuka Pharmaceutical, AstraZeneca, Bayer, Bristol-Myers Squibb, and Japanese Physical Therapy Association. Dr Nishio received honoraria for oral presentations from Eisai. Dr Matsuda reported no disclosure.

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