Appendix A

CASE 1

A 55-year-old right-handed man was admitted to the hospital with a 4-day history of progressive right hemiparesis and dysarthria. Neurologic evaluation revealed dysarthria, right hemiparesis, and mild sensory loss in the right face and upper limb. A CT scan showed evidence of an infarct in the posterior limb of the left internal capsule. Speech evaluation 2 ½ weeks after onset revealed a right central facial weakness. Speech was characterized by imprecise articulation, harsh voice quality and slow speech AMRs. Intelligibility was moderately reduced. There was no evidence of aphasia or cognitive disturbance.

CASE 2

A 29-year-old woman presented to a rehabilitation unit 14 months after cerebral anoxia that developed secondary to cardiac arrest during a tubal ligation. Neurologic exam revealed neck and left upper extremity rigidity, and weakness in all extremities. Gait was slow with short steps. She had difficulty with chewing and swallowing and frequently choked on solid foods. Speech evaluation revealed reduced loudness, imprecise articulation, accelerated speech rate, little variation in pitch, loudness and syllable duration, and reduced range of articulatory movement. Speech AMRs were "super fast and blurred."

CASE 3

A 63-year-old woman was hospitalized for evaluation/treatment of cardiovascular problems. She had a h/o myocardial infarction and had coronary bypass surgery 6 mo. previously. Three weeks before admission, she developed sudden onset of speech difficulty and problems with gait. She had no difficulties w/ language, chewing, or swallowing. Oral mechanism exam was normal. Speech was characterized by irregular articulatory breakdowns, irregular speech AMRs, and unsteady vowel prolongation; intelligibility was normal.