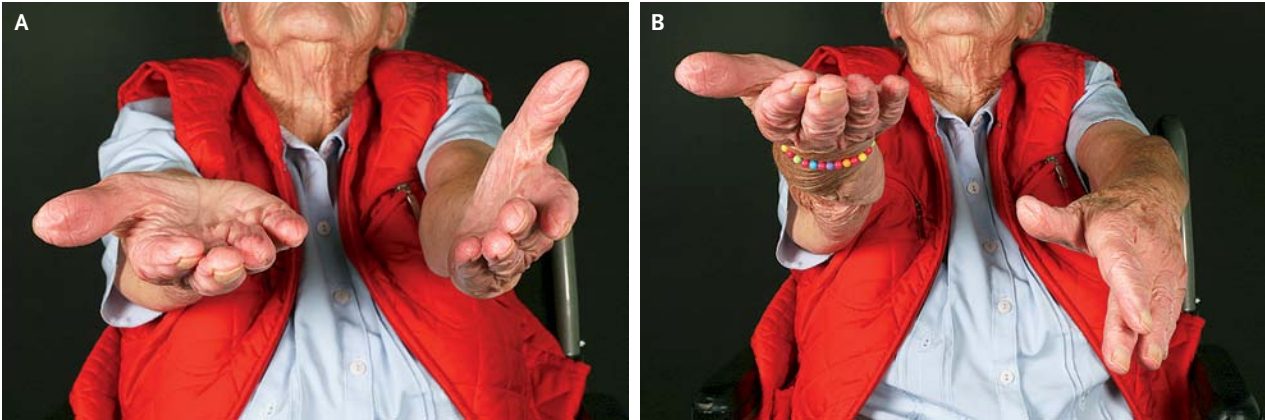


## IMAGES IN CLINICAL MEDICINE

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## Pronator Drift



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A 70-YEAR-OLD WOMAN PRESENTED WITH SUDDEN ONSET OF SLURRED speech and “dullness” in her head. She had had a cardioembolic event 12 years previously (National Institutes of Health Stroke Scale [NIHSS] score of 5 on this clinical measure of neurologic deficit, with a range of 0 [no deficit] to 42 [maximum possible deficit]) and had atrial fibrillation that was managed with warfarin. Physical examination was unrevealing except for pronator drift on the left side, which she said was a residual from the previous stroke. Pronator drift is an indication of a subtle upper motor neuron disorder, although it can be present in other conditions, such as inborn errors of metabolism. During a pronator-drift test, a patient is asked to hold his or her arms outstretched with palms facing upward. Panel A shows the patient with outstretched arms at the start of the test and Panel B with outstretched arms at the end (see video for the entire test). The eyes are closed in order to accentuate the response, because without vision, the patient must rely on proprioception alone to maintain the position of the arms. In the presence of an upper motor neuron lesion, the supinator muscles in the upper limb are weaker than the pronator muscles, and as a result, the arm drifts downward and the palm turns toward the floor. Diffusion-weighted magnetic resonance imaging in this patient showed a positive area in the region of the left middle cerebral artery, which accounted for the new onset of slurred speech and multifocal established lacunar infarcts around the corona radiata on the right side. We decided not to treat her with thrombolysis, owing to an NIHSS score of 1. The patient recovered with some mild residual dysphasia, which continued to resolve with stroke rehabilitation.

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