

FIGURE 116-4 Early signs of infarction on computed tomography of the brain. **A**, Hyperdense middle cerebral artery sign (red arrow), and **B**, hypoattenuation of the left caudate and lentiform nuclei, loss of the insular ribbon, and sulcal effacement (outlined in red).

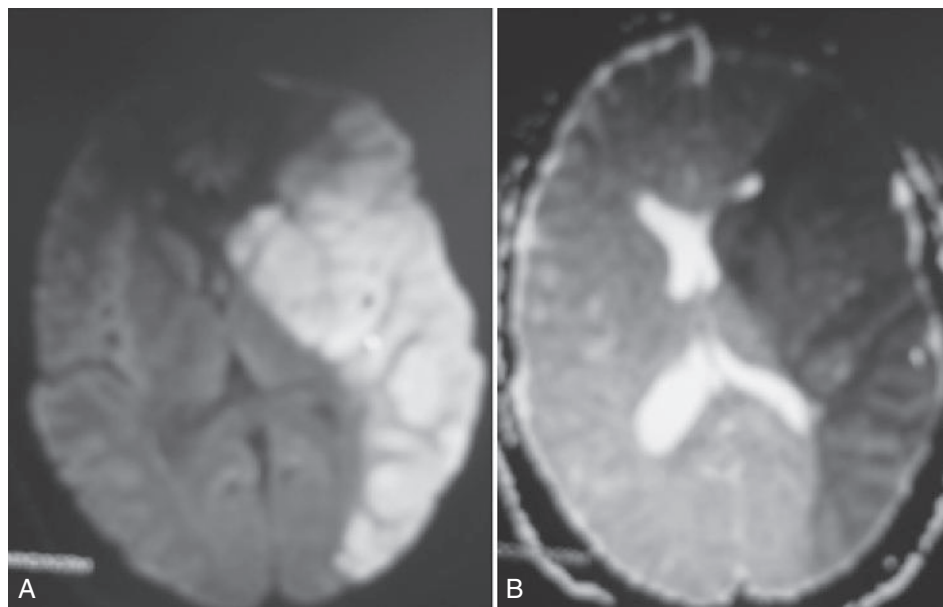


FIGURE 116-5 Magnetic resonance imaging scan of the brain of the same patient shown in Figure 116-4. **A**, Diffusion-weighted image shows bright signal in the left middle cerebral artery territory. **B**, Apparent diffusion coefficient shows dark signal in the same area, confirming acute infarction.

patients with ischemia will have symptoms resolve without infarction (thus, having a TIA) and which will have a completed infarction. Patients with either stroke or TIA need immediate attention to secondary prevention strategies. In terms of choosing treatments, the important issue is to identify the cause of the cerebral ischemia, rather than its duration. Entities other than cerebral ischemia can masquerade as strokes and TIAs. Among patients diagnosed with stroke in emergency departments, 20% or more have a stroke *mimic*, including seizure, migraine, systemic

infection, brain tumor, and toxic-metabolic encephalopathy. Other sources of misdiagnosis are listed in Table 116-4.

In patients with a prior history cerebral infarct or hemorrhage, new *metabolic derangements*, including infections, may precipitate a recrudescence of the original stroke syndrome. Hypoglycemia, hyponatremia, urinary tract infection, pneumonia, and starting initiation of a psychotropic medication can each precipitate this phenomenon. The patient returns to normal over hours to days when the new insult is treated or reversed. Such