



Visual Diagnosis

Hemidystonia in a Neonate

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This boy was born at term to a 21-year-old via Caesarean section due to nonreassuring fetal tones. He was well for the first 24 hours, but on day two of life he developed irritability and abnormal posture on the right side of his body. Initial examination revealed pleurothotonus with head version to the right, central left side facial droop, and flexed dystonic right side extremities with a claw-like posture of the hand (Fig 1). The presentation was concerning for a lesion involving the basal ganglia or rostral brainstem. Cranial ultrasound was normal. Electroencephalography showed excessive sharp activity in the left hemisphere, suggestive of underlying structural abnormalities. Magnetic resonance imaging of the brain

demonstrated a left pontine ischemic infarct (Fig 2A). Magnetic resonance arteriogram demonstrated occlusion of the distal basilar artery (Fig 2B). Echocardiogram was normal, and an evaluation for acquired hypercoagulable state was initiated. Treatment with low-molecular-weight heparin to prevent expansion of the initial occlusion, phenobarbital for seizure prophylaxis, and lorazepam for the treatment of dystonia, were initiated.

Neonatal arterial ischemic stroke can present acutely with seizures, altered level of consciousness, abnormal tone, focal weakness, and respiratory or feeding difficulties.¹ The symptoms often appear within the first three days of life, and have



FIGURE 1. The patient's abnormal involuntary posture with pleurothotonus with head version to the right, facial palsy, and dystonic right side extremities. The color version of this figure is available in the online edition.

Conflicts of interest: None.

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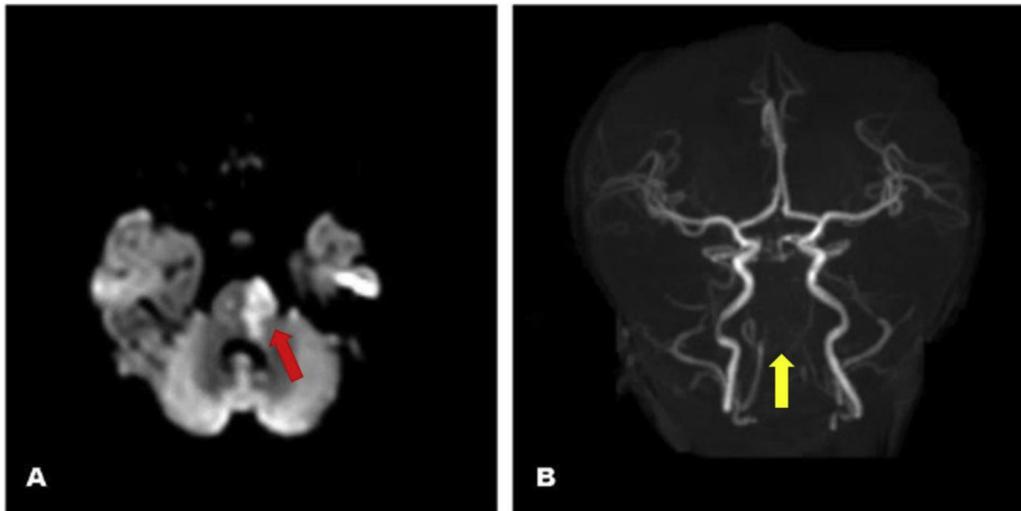


FIGURE 2. (A) Brain diffusion-weighted magnetic resonance image showing an acute infarct involving the left pons and left middle cerebellar peduncle (red arrow). (B) Magnetic resonance arteriogram showing occlusion of distal basilar artery (yellow arrow). The color version of this figure is available in the online edition.

various causes including cardiac emboli, vascular malformations, hypercoagulable states, infection, trauma, and hypoxia.^{2,3} This baby had an atypical presentation of neonatal arterial ischemic stroke with hemidystonia and facial palsy, emphasizing the importance of prompt radiographic imaging including angiography.

References

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