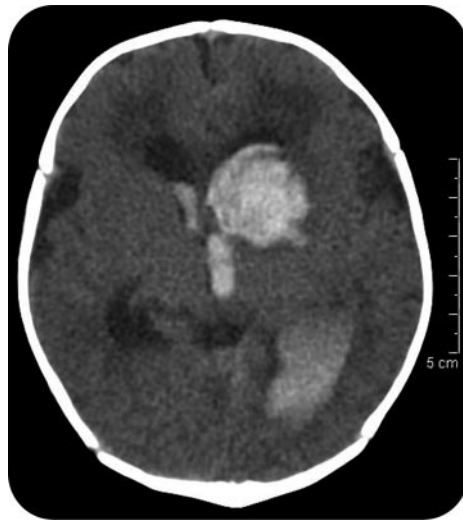


# Teaching NeuroImages: Neonatal intracerebral hemorrhage associated with aortic coarctation

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**Figure 1** Noncontrast head CT



Left basal ganglia hemorrhage with extension to the lateral and third ventricles and hydrocephalus were seen.

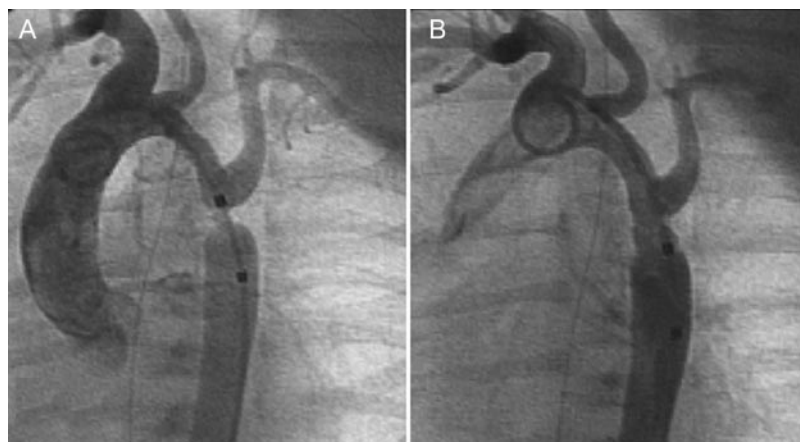
A previously healthy, vaginally delivered, term neonate developed spontaneous intracerebral hemorrhage (figure 1) at 3 weeks of age. Echocardiogram showed postductal aortic coarctation. His blood pressure in the right arm was 167/108 mm Hg (normal  $79 \pm 8/49 \pm 8$ ), and 111/78 in the right leg. Brain MRI and MRA did not reveal additional abnormality. Aortic angioplasty eliminated the stenosis (figure 2) and normalized the blood pressure. He developed posthemorrhagic hydrocephalus requiring shunting.

The common causes for spontaneous intracerebral hemorrhage in term neonates include coagulopathy, cerebral vascular malformation, tumor, infarction, and hypertension.<sup>1,2</sup> Aortic coarctation, a rare but surgically amenable condition, should be considered in the differential diagnosis.

## REFERENCES

1. Sandberg DI, Lamberti-Pasculli M, Drake JM, Humphreys RP, Rutka JT. Spontaneous intraparenchymal hemorrhage in full-term neonates. *Neurosurgery* 2001;48:1042–1048.
2. Jordan LC, Kleinman JT, Hillis AE. Intracerebral hemorrhage volume predicts poor neurologic outcome in children. *Stroke* 2009;40:1666–1671.

**Figure 2** Aortic angiography before angioplasty (A) and after angioplasty (B)



Aortogram showed focal aortic stenosis distal to the left subclavian artery orifice (A), and resolution of the coarctation after angioplasty (B).

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