Musical murmurs on transcranial ultrasound in childhood migraine with aura

A 12-year-old girl presented with headache, nausea, decreased level of consciousness, and diplopia. Brain MRI, arteriography (figure e-1 on the Neurology® Web site at www.neurology.org), vasculitic markers, and CSF were normal, as were EEGs and ECGs. Transcranial color-coded ultrasonography of the basilar artery revealed typical musical murmurs ("seagull cry") indicative of a hemodynamically significant stenosis (video). Sumatriptan provided symptomatic relief; basilar flow normalized on ultrasonography (figure e-2). The clinical presentation suggested childhood migraine with aura; the ultrasound and normal arteriography suggested focal, transient vasospasm during a migraine attack. Topiramate was effective long-term. The high prevalence of childhood migraine (up to >20%) suggests that ultrasound may be a useful diagnostic tool.

Peter Kraft, MD, Wolfgang Müllges, MD

From the Department of Neurology, University Hospital of Würzburg, Germany.

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Correspondence to Dr. Kraft: kraft_p1@klinik.uni-wuerzburg.de

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Peter Kraft and Wolfgang Müllges
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