

The triumvirate of acute hypertension

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A 52-year-old man acutely developed delirium and seizures associated with hypertension. MRI showed left hemispheric and brain-stem lesions (figure). Profound agitation precluded visualization of the fundi, however an acute hypertensive retinopathy became apparent after pupillary dilatation (see figure). EKG (figure) and echocardiography showed left ventricular hypertrophy. With antihypertensive treatment, most lesions resolved within 2 weeks.

Hypertensive encephalopathy typically causes symmetric, posterior predominant cortical and subcortical lesions. Frontotemporal, corona radiata, pontine, or cerebellar lesions or strictly unilateral lesions occur less commonly.¹ In any patient with unexplained MRI abnormalities and hypertension, attention should be directed toward other organ damage particularly the retina.

References

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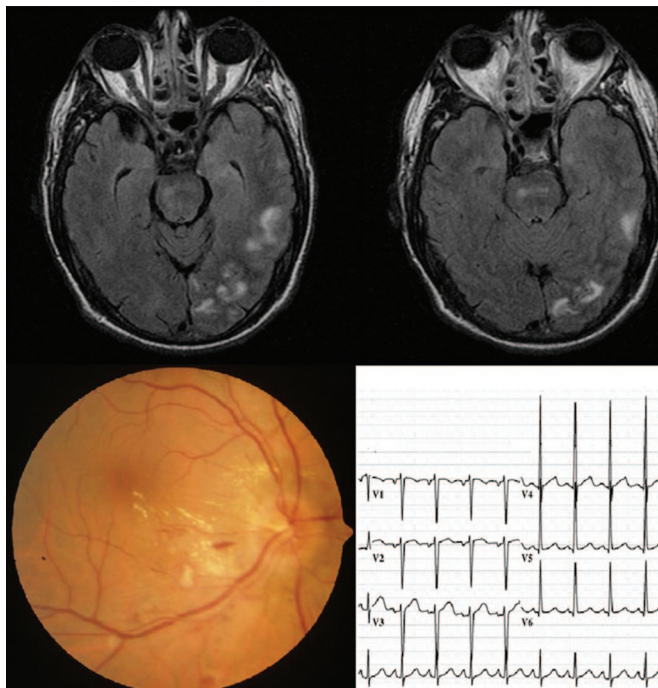


Figure. Flair MRI of the brain shows unilateral left hemispheric and bilateral pontine lesions. These lesions are absent on diffusion weighted images (not shown) and consistent with cytotoxic edema. Fundus shows hemorrhages and cotton wool spots consistent with malignant hypertension.² EKG shows left ventricular hypertrophy.

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