

Severe but reversible hypertensive encephalopathy



Fig. 1

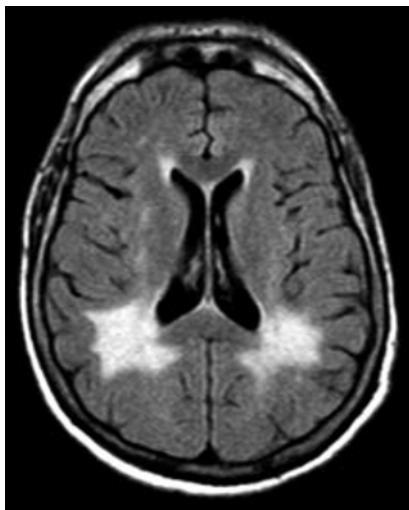


Fig. 2



Fig. 3

A 30-year-old male caucasian patient presented with excessive hypertension (240/120 mmHg), somnolence and signs of bulbar paralysis. His medical history was insignificant except for the presence of headache for several months and flank pain one week prior to admission. An initial cranial CT-scan (Fig. 1) showed diffuse periventricular hypodensities, which could be attributable to diffuse progressive leukencephalopathy based on vascular, toxic or inflammatory genesis. Because of severe renal dysfunction hemodialysis was initiated and blood pressure was normalized with i.v. medication. Toxicological investigations were negative. A cerebral MR-imaging confirmed the initial CT-scan and displayed extensive central hyperintense areas bilaterally with a periventricular predominance and additionally small brain-stem lesions (not shown). One week later complete neurological recovery occurred and the radiological findings in both hemispheres were regressive with residual hyperintense areas periventricular at the posterior horns in the FLAIR sequence (Fig. 2) and the brain stem lesions were resolved. A CT-scan three months later showed complete remission of cerebral lesions (Fig. 3).

A renal biopsy revealed chronic and acute microangiopathy and focal sclerosis. The patient is still on maintenance hemodialysis and without any neurologic impairment.

Hypertensive encephalopathy is a reversible complication of chronic renal failure [1]. However, severe radiological alterations associated with hypertensive crisis may persist for a long time in spite of neurological recovery [2]. The lesions associated with hypertensive encephalopathy are commonly restricted to the posterior brain area. In accordance with a recent report [3] our patient showed an involvement of multiple brain areas. In the long-term follow up these alterations were fully reversible with blood pressure normalization.

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References

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