Haemorrhagic stroke as a first presentation of primary aldosteronism

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Abstract

Introduction: Intracerebral haemorrhage (ICH) is the most devastating and disabling type of stroke. It is known that hypertension is the primary risk factor for ICH and its treatment is highly effective in the prevention of stroke. Secondary hypertension represents a small proportion of hypertension aetiology in adults. However due to its appropriate specific treatment, attention should be paid. Primary aldosteronism (PA) may occur in 3-10% of hypertensive patients and it is known that PA has an increased risk of cardiovascular and cerebrovascular complications and an increased rate of metabolic syndrome when compared with patients with primary hypertension.

Case Report: A 54-year-old male, with previous history of hypertension, presented at the emergency department with history of frontoparietal headache, periods of mutism alternating with speech impairment and right-side muscle weakness. Brain computed tomography (CT) scan showed an intracerebral haemorrhage in the left temporal lobe. From the aetiological study, hypokalemia and hyperglycemia were found, together difficult-to-control hypertension and an elevated aldosterone/renin ratio. Due to a suspicion of hyperaldosteronism, an abdominal CT scan was performed, and a nodular formation was detected in the left adrenal gland. Hypertension was controlled with high doses of anti-hypertensive medication including mineralocorticoid antagonists. The patient was discharged with no symptoms and referred to endocrinology consultation.

Conclusion: Prevalence of PA is not low among acute stroke patients and due to its increased risk of cardiovascular, cerebrovascular and metabolic syndrome complications, its early diagnosis and treatment are important particularly in ICH patients.