Not just vertigo – the importance of repeating the head computed tomography

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From the Porto University Center of Medicine Stroke Update Course, Porto, Portugal. 20–21 June 2017.

Abstract

Introduction: Sudden onset of focal neurologic deficits is the hallmark of the diagnosis of ischemic stroke. Symptoms like speech disturbance and weakness on one-half of the body are almost always present. Headache and non-orthostatic dizziness are only estimated to be present in about 13-14% of the cases of ischemic stroke. Dizziness is more common in posterior circulation stroke.

Case Report: Female, 74 years old, dementia, hypothyroidism, diabetes mellitus, dyslipidaemia, medicated with memantine 10mg, levothyroxine 50mcg, sitagliptin 100mg, simvastatin 20mg and acetylsalicylic acid 100mg. She was admitted in the emergency room with the following complaints: dizziness, nausea and vomiting, accompanied by disorientation. Brain computed tomography (CT) showed no acute lesions, and the patient was discharged medicated with beta-histine. She returned the next day with the same complaints and history of a fall with head trauma without loss of consciousness. CT showed doubtful “...sequelae of cerebellar infarcts?”. She repeated the CT 24 hours later and the cerebellar lesion was larger - probable right posterior inferior cerebellar artery /basilar stroke with small regions of haemorrhagic transformation. The patient stayed hospitalized for 15 days and was discharged with the same medication, with a Neurology appointment because she maintained disorientation likely related to her dementia.

Conclusion: Posterior circulation strokes may be difficult to diagnose. Dizziness is a common complaint in the general population, mainly in the elderly, with many possible causes, which could lead to misdiagnosis of some posterior circulation stroke cases, despite this presentation being rare. Even when the first CT is not diagnostic, repeating the CT 24 hours later may help establish or exclude stroke as the cause for dizziness.