Introduction: Dizziness is a nonspecific symptom, often disabling, common in primary health care. The terms vertigo and dizziness are often used indistinctly, but it is fundamental to differentiate vertigo, which has a vestibular cause (peripheral or central). Some studies suggest that stroke may account for 25% of acute dizziness without other neurological signs or symptoms.

Case Report: A 51-year-old male, independent, married, living in Porto with his wife, worked as a general contractor. He had a prior history of hypertension, dyslipidaemia and past smoking. His usual medication was Perindopril/Indapamide 8/2.5 mg id and Simvastatin 20 mg id. He was admitted in the emergency department on 13/01/17 at about 9:20 pm for general malaise, dizziness, nausea and vomiting. He was diagnosed with a peripheral vertigo syndrome. Because of refractoriness to the medication, blood tests were performed and were normal. The next day, around 9:12 am, he had right conjugate eye deviation. His neurological exam revealed eye deviation, minor left facial paralysis, right hypoesthesia and slight dysarthria. No limb paresis or dysmetria was observed. Brain computed tomography (CT) revealed a right cortical-subcortical cerebellar hypodense area, corresponding to an already established ischaemic injury. The cerebral CT angiography revealed right vertebral artery occlusion. Additionally, a likely thrombus was identified at the origin of the basilar artery.

Conclusion: Vertigo in an emergency department has specific epidemiological characteristics. The family physician must recognize the situations that motivate an immediate referral to an emergency department.