**IS MY PATIENT WITH ACUTE DIZZINESS HAVING POSTERIOR CIRCULATION STROKE - HOW SHOULD I APPROACH?**

JEN SIANG NG1; TZE SIANG OOI1; CHUI KING WONG1; ALZAMANI MOHAMMAD IDROSE

1 *HOSPITAL KUALA LUMPUR, KUALA LUMPUR, MALAYSIA*

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| Introduction: Dizziness is commonly encountered in emergency department. Nonetheless, not all dizziness are due to benign causes.  Case description: A 73-year-old previously healthy lady, presented with sudden onset, continuous dizziness which started since 2 hours ago, which was described as lightheadedness and unsteadiness, and  was associated with vomiting. Upon assessment, she was alert and hypertensive, with upbeat nystagmus, left lateral gaze palsy with left internuclear ophthalmoplegia. The tone, power, reflexes of all limbs and cerebellar test were normal. Stroke protocol was activated. Plain computed tomography (CT) brain, CT angiography brain and neck, and CT perfusion were done, which showed acute pontine infarct with basilar artery occlusion, with no perfusion mismatch. Subsequently she underwent intravenous thrombolysis (IVT) with alteplase and she was planned for endovascular thrombectomy (EVT). However while awaiting EVT, patient became less responsive with bradypnea. She was then intubated and mechanically ventilated. Repeated CT brain showed no haemorrhagic transformation. She then underwent EVT, with partial recanalization of basilar artery. However post EVT, patient had poor GCS recovery, and repeated CT brain showed evolving posterior circulation infarct with mass effect causing obstructive hydrocephalus. Patient underwent withdrawal of life support after discussion with family members.  Discussion: Acute dizziness is a common presentation in the emergency department [1], which encompasses vertigo, unsteadiness/disequilibrium, lightheadedness, presyncope and other non-specific  forms of dizziness [1]. Due to newer research, the diagnostic approach to dizziness has changed, now focusing on its timing and triggers instead of the patient's description of dizziness [2]. Based on the timing and triggers, acute dizziness can be classified into acute vestibular syndrome (AVS), spontaneous episodic vestibular syndrome (s-EVS) and transient episodic vestibular syndrome (t-EVS) [3]. AVS is a clinical syndrome of acute-onset continuous dizziness lasting days to weeks and generally including features suggestive of new, ongoing vestibular system dysfunction (nausea and vomiting, nystagmus, and postural instability), with differential diagnoses including posterior circulation stroke, vestibular neuritis and other less common causes [1].  Conclusion: High index of suspicion with pragmatic approach to dizziness will lead to better recognition of posterior circulation stroke which is diagnostically challenging.  Keywords: Dizziness, Acute Vestibular Syndrome, Posterior Circulation Stroke |