Transient acute diplopia and bilateral exotropia following coronary angioplasty: A rare neurological complication

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ABSTRACT

Introduction: Coronary artery disease (CAD) is frequently managed with percutaneous coronary intervention (PCI), including balloon angioplasty. While common complications of PCI are well-documented, rare neurological manifestations such as transient diplopia and ocular motility disturbances are seldom reported. **Case description:** We report the case of a 75-year-old Malay male with a longstanding history of CAD and multiple prior percutaneous angioplasty procedures. The patient presented with acute onset binocular diplopia and bilateral lateral exotropia within hours following a routine balloon angioplasty. He was haemodynamically stable with no focal neurological deficits. Urgent brain computed tomography (CT) and magnetic resonance imaging (MRI) ruled out cerebral infarction or haemorrhage. Comprehensive ophthalmological evaluation revealed no intrinsic ocular pathology. The patient experienced spontaneous complete resolution of symptoms within 48 hours without any medical intervention. **Discussion:** This rare presentation raises the possibility of transient microembolic events — potentially calcium or atheromatous debris — affecting the ocular motor centers of the brainstem during angioplasty. While embolic strokes are recognized complications of PCI, isolated, reversible diplopia and ocular deviation without radiographic findings are exceedingly rare. **Conclusion:** Transient diplopia with bilateral exotropia may represent an unusual and underrecognized complication of coronary angioplasty. Awareness of this phenomenon is important to avoid unnecessary interventions and to reassure both patients and clinicians of its typically benign and self-limiting course.

Keywords: Coronary angioplasty, diplopia, exotropia, microembolism, neurological complication