

Post Operative Visual Loss Following Non-Ophthalmic Surgery. A New Zealand Perspective.

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Introduction: Postoperative visual loss is a rare but devastating complication following non-ophthalmic surgery. Its worldwide incidence is reported to be between 0.1% to 1%. The aetiology of this catastrophic complication is multifactorial and remains incompletely understood. We report 8 cases of blindness following surgery in New Zealand.

Methods: We reviewed all cases of postoperative blindness reported as Treatment Injury to the Accident Compensation Corporation (ACC) of New Zealand between 1 July 2005 and 1 January 2010. Case inclusion criteria were visual loss within seven days of non-ophthalmic surgery and claim acceptance by ACC.

Results: Ischaemic optic neuropathy (ION) accounted for post operative visual loss in seven eyes of six patients, with one patient suffering bilateral ION. Cortical ischaemia caused visual loss in three patients. Six of eight patients were male. Two patients were obese and also had a history of hypertension. Postoperative visual loss occurred after two neurosurgical procedures, following transphenoidal resection of a pituitary tumour and subsequent to coiling of an aneurysm. Bilateral blindness secondary to ION occurred after a prolonged and difficult on-pump mitral valve replacement. One patient who underwent bilateral sequential lung transplant developed blindness secondary to cortical ischaemia. Post operative visual loss occurred following orthopaedic shoulder surgery for a rotator cuff tear and following a total hip joint replacement. ION and cerebral infarction resulted in visual loss following one case of head and neck surgery. Bilateral visual loss secondary to ION occurred after repair of a large incisional hernia.

Discussion: The development of postoperative visual loss is a devastating and unanticipated injury. Its true incidence in New Zealand is unknown as there is no mandatory reporting system for this complication. In addition to increasing awareness, further studies are needed to elucidate the aetiology of this condition and hence develop prevention and treatment strategies.

References: Lee LA 2003, Williams EL 1995.