UNILATERAL POST OPERATIVE VISUAL LOSS DUE TO CENTRAL ARTERY OCCLUSION WITH TOTAL OPHTHALMOPLEGIA FOLLOWING CERVICAL SPINE SURGERY IN PRONE POSITION

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Blindness during spinal surgery is a rare complication, but it is serious, irreversible, and incurable. A 52 year male having ischemic retina and total ophthalmoplegia probably caused by prolonged compression of eyeball post C1-C2 cervical spine surgery for atlantoaxial dislocation with odontoid hypoplasia and myelomalacic changes in which C1 lateral support and C2 pedicle plate screw fixation from posterior approach was done in prone position. Duration of surgery was around three hours. He was induced with thiopentone and halothane. Ventilation was controlled with oxygen and nitrous oxide (1:2) and vecuronium used for muscle paralysis. Blood loss during surgery was 600-700 ml. Post operative ocular examination showed relative afferent papillary defect in right eye with pale retina, attenuated arterioles, and a cherry red spot which confirmed the diagnosis of central retinal artery occlusion. CT and MRI of brain and orbit were grossly normal, visual evoked potentials showed decreased amplitude and delayed latency. Various risk factors associated with it include hypertension, diabetes mellitus, polycythemia, smoking, renal failure, primary angle closure glaucoma, collagen vascular disease, raised intra ocular pressure, increased central venous pressure etc. Proper consent, proper head position, avoid external compression of globe, checking eyes intermittently during surgery, a prone view foam cushion system are some of the preventive techniques. Although a number of intraoperative and postoperative factors have been implicated exact etiology still remains unclear.