44509 - POST-OPERATIVE VISUAL LOSS AFTER PLASTIC SURGERY IN THE PRONE POSITION: A CASE REPORT

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PURPOSE: To highlight that hemodynamic alterations in at risk patients is more likely to cause post-operative blindness than is external pressure on the eyes. The ASA task force on postoperative visual loss recently published it's report on 97 cases of postoperative visual loss(1). Attempts to define risk factors have been undertaken(2), but mechanisms remain difficult to elucidate. The recent publication by Lee et al. advocates that postoperative visual loss is caused by hemodynamic disturbances rather than external compressive forces. We present a case report of a 62 year-old male who presented for keloid split-thickness skin graft done in the prone position who developed posterior ischemic optic neuropathy and consequently visual loss, upon awakening.

CLINICAL FEATURES: IRB consent for data publication was obtained. This 62 year old male (ASA II) presented for split-thickness skin graft for a keloid, and had no prior medical conditions, although he was suspected of having undiagnosed glucose intolerance upon arrival. The keloid was on his posterior neck, and so his head was placed in a horseshoe headrest. After induction, the patient had a drop in systolic blood pressure to 60mmHg for 5 min before the blood pressure was controlled again above 100mmHg. The head position was checked at the beginning of surgery and the eyes were free of compression. Intraoperatively, the patient lost 2L of blood and received 3L of crystalloid and 1L of colloid. The Hematocrit pre-operatively was 45%, and at completion of surgery was 23%, at which time he received 2U of PRBCs and had a rise in Hb from 82 to 105g/L. After 3 1/2 hours of surgery, the patient was brought to the PACU, where upon awakening he complained of blindness. The patient received 20mg of dexamethasone, and was seen urgently by an ophthalmologist confirming the diagnosis of posterior ischemic optic neuropathy.

CONCLUSION: We present a case of postoperative visual loss with a patient in the prone position on a horseshoe headrest; we suspect intraoperative anemia and hypotension as the cause after compressive causes were ruled out by the ophthalmologic findings. In prone surgery, preventive measures to avoid postoperative blindness should emphasize the maintenance of a normal hematocrit and a sufficient blood pressure as well as the usual care taken to correctly position the head and avoid compression of the eyes.

REFERENCES: 1. Anesthesiology 2006; 105(4):652-9 2. Anesth Analg 2001; 93:1410-6