



## North American Neuro-Ophthalmology Society

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### **Risk factors associated with vision loss after spine surgery identified.**

Six independent risk factors are linked to blindness after prone spine surgery, a rare but devastating complication.

Spinal fusion surgery can rarely be complicated by post-operative visual loss, often severe and blinding. The most common cause of the visual loss is ischemic optic neuropathy, occurring in as many as one in 1,000 spine surgeries. Researchers from across North America, including neuro-ophthalmologist and NANOS member, Nancy J. Newman, M.D. from Emory University, Atlanta, Georgia, reported their results of a case-control study investigating the risk factors associated with this dreaded complication in the January issue of *Anesthesiology*, the journal of the American Society of Anesthesiologists (ASA).

Investigators used information from a large national database created by the ASA to identify patients with visual loss after spine surgery and compared the data to patients who did not experience vision loss undergoing similar spine surgeries from 17 medical centers in North America.

The six independent risk factors associated with vision loss included: male sex; obesity; use of a particular surgical frame that places the head lower than the heart; longer surgery; greater blood loss; and the use of a lower percentage of colloid in the non-blood fluid replacement.

This is the largest study performed to date on this complication that used very detailed data, especially as regards intra-operative parameters. Identification of the six major risk factors for ischemic optic neuropathy after spine surgery will hopefully lead to the modification of some of these factors and potentially a decrease in the risk of blindness after back surgery.

#### References:

1. The Postoperative Visual Loss Study Group. Risk factors associated with ischemic optic neuropathy after spinal fusion surgery. *Anesthesiology* 2012;116:15-24.
2. American Society of Anesthesiologists Task Force on Perioperative Blindness. Practice advisory for perioperative visual loss associated with spine surgery: A report by the American Society of Anesthesiologists Task Force on Perioperative Blindness. *Anesthesiology* 2006;104:1319-28.

**Note to media:** [Click here](#) to view the full text of the study. Please contact [info@nanosweb.org](mailto:info@nanosweb.org) to arrange interviews with experts.

### **About the North American Neuro-Ophthalmology Society**

The North American Neuro-Ophthalmology Society (NANOS) is the only organization dedicated to the advancement of neuro-ophthalmologic education and information in North America and has over 500 members. NANOS is dedicated to the achievement of excellence in patient care through the support and promotion of education, communication, research, and the practice of neuro-ophthalmology. For more information, please visit [www.nanosweb.org](http://www.nanosweb.org).