## Description

A 20-year-old diabetic suffered from ocular nerve damage following prolonged back surgery.

## Clinical Sequence

A 20-year-old male with insulin dependent diabetes injured his back on a submerged rock while jumping off a boat dock at a friend's home. He was taken by ambulance to a local hospital, then transported to a Boston Emergency Department. He arrived at 8:30 p.m., Saturday, June 28.

In the ED, the patient was seen by a neurosurgeon and an orthopedic resident. A neurological exam performed shortly after admission showed upper leg weakness and no reflexes in his lower extremities; X-rays revealed a burst fracture of his lumbar spine at L-4. The resident placed the patient on steroids and had him admitted. Over the next 40 hours, the patient's neurological condition improved, although he had decreased sensation below both knees, and no reflexes in either leg.

Monday afternoon, a staff orthopedic surgeon reviewed the patient's X-rays and advised the orthopedic resident that surgery was necessary. Tuesday morning, the staff surgeon discussed with the patient (and his mother) the risks of the surgery, including nerve and vessel damage, bleeding, infection, and non-union. Neither the surgeon, the patient, nor the record recall a discussion regarding the risk of vision loss.

The surgery started at 1:30 p.m. Wednesday with the patient on his back. The attending orthopedic surgeon (assisted by a general surgery resident) removed part of the vertebra and bone fragments at L-4. He then placed a cage in the area of the partially removed vertebra. Six hours after the procedure began — after verification from the anesthesia resident that the patient was stable enough for the second stage of the procedure—the patient was turned face down. The surgeon then mechanically secured the spine. He elected not to extend the surgery further to remove one bone fragment in the spinal cord that he determined was not pressing on any nerve roots. The posterior surgery ended at 1:45 a.m., Thursday, July 3. During the 12 hours of surgery, the patient lost 9 liters of blood, which required administration of 23,000 cc of fluid.

Post-operatively, the attending surge on left for a camping trip in Maine. The patient was taken to the ICU and remained intubated. His face was swollen from the fluid replacement and he did not open his eyes for most of Thursday. Around 7:00 p.m., the patient complained he couldn't see. When the ICU staff was unable to reach the attending surge on, they consulted with Ophthalmology and Neurology. Hyperbaric oxygen treatments were discussed. At midnight, another surge on examined the patient, who was now blind. Testing revealed that damage to the posterior optic nerve — likely caused by the heavy blood loss during the spine surgery — had caused the vision loss.

In addition to the permanent vision loss, the patient also suffered permanent right foot drop.

## Claim Sequence

The patient sued the attending and resident surgeons, alleging that their decision to complete both stages of the procedure during one operating session was directly responsible for his blindness.

## Disposition

All parties agreed to take this case to mediation, which led to a payment in excess of \$1 million.