

*“I know I’m pretty lucky to be here.”*

*Jon Morris had suffered headaches before, but nothing like this. “I bent over, had an enormous head rush and then the worst headache of my life,” he recalls. As the headache persisted, his vision worsened to the point that he could no longer read.*



Jon Morris has returned to his construction job.



Ali Naini, MD

The 29-year-old Morris went to the Emergency Department at Evergreen Hospital, where Dr. Randall Unger evaluated him and suspected that there had been a brain hemorrhage. A CT scan confirmed it – there was a four-centimeter blood clot within the occipital lobe, a region of the brain responsible for vision. Dr. Unger contacted neurosurgeon Dr. Ali Naini, who felt that the most likely cause of this hemorrhage was an arteriovenous malformation (AVM).

About one in every thousand people is born with this fragile tangle of arteries and veins that carries rapidly flowing blood. A person with an AVM has an annual three percent risk of brain hemorrhage and a one percent chance of death. CT angiography verified that there was an AVM deep within Morris’ occipital lobe, and he was admitted to the Intensive Care Unit.

#### EVERY MILLIMETER COUNTS

Further imaging studies established that embolization, a treatment using catheters, would not be a viable option. “The focus of our concern shifted towards removing the AVM while preserving what was left of Jon’s vision,” Dr. Naini recalls. “Every millimeter of neuronal tissue surrounding the AVM was crucial to this goal if there was to be any hope of restoring this young man back to a normal life.”

Working with neuroradiologist Dr. Pedro Vieco, Dr. Naini analyzed three-dimensional images of the network of blood vessels making

up the AVM, and together they devised a minimally invasive surgical approach through the base of the occipital lobe. During the six-hour surgery, removal of the AVM was monitored by high-resolution color Doppler ultrasound and then confirmed by cerebral angiography.

“The goals of surgery were surpassed,” Dr. Naini explains. “The AVM was permanently removed, and Jon’s vision was not only preserved, but markedly improved.” He adds, “Jon’s case was a vivid example of the depth of collaboration that occurs among the staff at Evergreen. People are passionate about their work, and this synergy makes superb outcomes possible on complex cases.”

#### AN EVEN BETTER PERSON

Jon Morris went home from the hospital three days after surgery. His vision has dramatically improved to the point that he can read and even has an unrestricted license to drive his car. His headache and other symptoms have fully resolved, and he is back at work. Jon is grateful for the special level of care that he received at Evergreen and for being able to return to a normal life.

The AVM with which he lived for so many years has provided some lasting lessons, too. “It was a rude awakening,” he says ruefully. “I’m trying even harder now to become a better person. I know I’m pretty lucky to be here.”

*For a referral to an Evergreen-affiliated neurosurgeon, call the Evergreen Healthline at 425.899.3000.*