Brain Hemorrhage and Brain Injury

Dr. Ghaly Comments:

Brain hemorrhage can be caused by several conditions. Commonly, trauma, a hit to the head or trauma to the head, such as in an accident, may cause the brain to hemorrhage. If the hemorrhage is of a special type, surgery is needed immediately to relieve pressure on the brain. The brain is encased in the skull, which usually protects it, but if the brain suffers a traumatic insult which causes swelling, there is no place for the brain to go and it is squeezed. The patient may feel OK for a while after the accident, perhaps even for several hours, while the swelling continues. But once it is enough to cause pressure on the brain, symptoms will start to appear. This is called herniation.

It is important to remember that the brain can only survive for about five minutes without oxygen or blood flow.

A second cause of brain hemorrhage is uncontrolled high blood pressure, especially when the upper number is 170 to 180 or even higher. This causes severe headache and pressure in the eyes, causing brain hemorrhage.

Third, people who are on blood thinners for other medical conditions may suffer brain hemorrhage. Drugs such as coumadin, Plavix, or even aspirin may cause brain hemorrhage. They need to be monitored very carefully.

Also problems in the circulatory system may cause brain hemorrhage, such as an aneurism. This happens in otherwise healthy people and onset of symptoms is very abrupt. If an aneurism is not diagnosed and treated early, before the hemorrhage, some 2/3 of patients will not have a successful outcome. Symptoms include a very severe headache. Patients are usually taken to an emergency room where a CAT scan reveals the aneurism, called a subarachnoid hemorrhage. Treatment is to place a stent-like coil device to open the blood vessel or immediate surgery.

Tumors, which bleed, may also cause a brain hemorrhage.

With all these conditions, without immediate treatment, deep coma followed by death is the outcome.

Treatment for brain hemorrhage should be immediate and aggressive and recovery may take weeks, months, or even years. Patients find their memory gone until the pressure is relieved, so they remember little of the event or treatment. Usually we see at least some improvement within the first three months after the insult to the brain.

A supportive and dedicated family and/or friends can be extremely important in the recovery of a patient stricken by a brain hemorrhage. The patient needs a supportive and committed family to care for them until the brain has a chance to recover. We find the family is usually the first to tell when the patient is making some progress in recovery. Often the healthcare provider will say the patient is in a deep coma, but the patient’s family will notice small improvements.

It is interesting to note that we have no objective method to predict which patient will recover, and which patient will not recover. So I advise aggressive treatment until the patient shows signs of gradual recovery. Patients, who show they are fighting to survive, who fight for life, and the other body
systems are functioning, are usually the ones who recover. And recovery may take weeks, months, or years. There is just no test to tell us which patient will recover, so the physician needs to continue to hope. There are reports of patients recovering after months in a coma, and after healthcare providers have given up all hope of their recovery.

Brain death is one indication a patient will not recover, but even that can be difficult to determine. Brain death means:

1. There is no blood going to the brain, which is determined by a blood flow study.
2. There is no brain activity or function.
3. There is no electrical activity within the brain.
4. The patient shows no responses to stimulus whatsoever.
5. The eyes do not open or respond to stimulus.
6. There is no swallowing reflex
7. There is no cough reflex.
8. There is no response to auditory stimulus.
9. There is no gag response.
10. There is no movement.
11. The patient cannot breathe by himself or herself.
12. A CAT scan or MRI shows the brain is dead.

Even with the above indicators, testing should be done again in 24 hours time, and longer for children because they have more plasticity in the brain and may show signs of recovery even later. The physician also needs to make sure the brain death is not caused by medication, sedation, or cold, all things which may cause brain death.

In general, younger, healthy patients have a greater chance of recovery from brain hemorrhage. If we can control pressure to the brain, which can be measured by a measuring device placed inside the brain, and do surgery sooner, there is a better chance of a successful outcome. If the pressure continues to build, even after intervention, that is a bad sign.

Finally, it is important to remember that a patient is facing a long and difficult recovery after a brain hemorrhage. I tell patient’s families that their loved one will become like an infant, requiring extensive care again, just as they did when they we newborn. It takes vigilant care, both o the part of the healthcare provider and the patient’s family, to ensure a successful recovery. Like an infant, the brain cannot talk and tell you what is wrong, so the doctor has to anticipate and work hard to prevent any secondary insults to the brain. Secondary insults occur when other body systems begin to fail. Such things as kidney failure or pneumonia cause a secondary insult to the brain as it is trying to recover. All these can harm the brain while it is trying to recover from its initial insult, the hemorrhage. Our goal as physicians is to maintain a healthy body until the brain can recover.

The family needs to continue their commitment to the patient’s care for up to a year or longer. These, in my experience, are the patients who do well. Usually, the fighters for the patient are family members. There is also an increasing confusion that the patient would want to terminate life if there are questions of what the quality of that life might be after recovery. It is impossible to determine what the quality of life will be, as no one can predict who will recover, and who will not. There is nothing absolute about who will recover. So my fear is that we are terminating life prematurely in many cases.
In addition, it is my experience that patients who might say when they are perfectly healthy they would not want to live a disabled life often change their minds. I had a patient who told his wife he would not want to live if he could not walk his dog. He suffered a brain hemorrhage, and his wife agreed to the surgery. The man is confined to a wheelchair today, seven years later, but he has told his wife he is glad she went against his expressed wishes and opted for aggressive treatment.

The fact remains, at the time of the insult to the brain, we cannot be sure of a lot of the end results.

Further comfort may be taken in the fact that the patient does not report suffering while in a coma. In my experience there is no suffering during a coma. We have never had a single patient wake from a coma and say they suffered. The family suffers when their loved one is in a coma, but not the patient. This is a gift from God. The patient’s memory starts after they wake up from the coma.

I always caution people about a DNR (do not resuscitate) order or advanced directive. My fear and my observation has been that these things are used by medical facilities to relax treatment, preventing the aggressive treatment so necessary for a recovery. I strongly advise the patient needs to continue aggressive treatment until clearly there is no hope of recovery: there is no activity in the brain; there is an anoxic response; there is no auditory or visual response; no reflexes; and the CAT/MRI shows a major insult, especially to the dominant side of the brain (the left side for a right handed person, which controls cognition).

It is my opinion that aggressive treatment for the brain should be continued. If it is God’s will for the patient to recover and live, it is prudent to stand by the person and provide treatment. There are many ways for the patient to die after a brain hemorrhage. If it is God’s will for the patient to die, it will be so. But the patient’s family should be committed caregivers early on to ensure every possibility for a good outcome and recovery.

The family should always look for the small improvements, with a glass half full attitude. Be positive. Keep a diary and take pictures. You’ll share that diary with the patient once they awaken. The diary will also be helpful in teaching family members how to care for the patient. I know of one patient, whose family shared eight-hour shifts at the hospital, keeping a lap top computer in the room on which to record the care and responses of the patient during each shift.

The family is really the best advocate for the patient. There is nobody who takes as good care of a patient as his or her family. Sadly, often the patient becomes a number to the healthcare providers. But the family always places the patient and his or her care first.

Be aware also of how the healthcare system works, Ancillary services, such as physical or occupational therapy, and insurance companies have developed terms, which if taken literally, can be disappointing, as well as affecting patient care. Plateau is one such term. If a patient is said to have reached a plateau, the patient is said to be no longer improving, and the insurance company will terminate care. A plateau does not mean the patient will never make more strides to recover. Many brains will continue to recover for years. Remember it takes an infant brain 18 years to develop into an adult brain. If we wait long enough and keep the rest of the body healthy, many patients will eventually further improve, even after years. I had a patient who was paralyzed from a major stroke and seven years later he began to be able to move. Just as a baby needs a mother to care for it for many years, so, too, a brain which has been injured from a brain hemorrhage needs care, often for many years as well.
CARMEL P.

A 50 years old female presented with hemorrhage in the brain secondary to a stroke. The cause of stroke is because of the heart valve surgery that was done when she was 16 years old. The artificial heart valve can cause some emboli and high blood pressure. Furthermore, she was in blood thinner that can make this hemorrhage worse. The brain hemorrhage occurred in the dominant side of the brain, the left side in the back where people understand, talk and read. She had difficulty in reading, writing, understanding and getting sleepy. She could not be off blood thinner for long. The brain hemorrhage can also be related to tumor. She was urgently taken to surgery; the hematoma was evacuated through the craniotomy and was sent for pathology. The bleeding was controlled and the patient went to intensive care unit and CT scan showed no more hemorrhage. Pathology showed no tumors. She required extensive speech therapy for one year to learn how to talk. Furthermore, when therapist and doctors told her that was done, her two daughters did not give up and at home both daughters and patient were performing many therapies, education, going slowly through language, writing and typing. She was a court reporter. Over the years from 1999 to 2010, she even improved more and learned the new technology devices such as computers, cell phones and she lives independent with clear speech and great wisdom.

Carmel P. had already had two heart surgeries and was on the blood thinner coumadin when she suffered a brain hemorrhage in 1999, likely caused by the coumadin. She had been experiencing a severe headache for more than a week, yet still going to work, when her co-workers noticed she did not look right. In fact, she was so bad that her supervisor actually drove her home. “I realized something was terribly wrong,” she recalls. “But I didn’t know how wrong.”

Carmel was taken to the hospital by her then husband and daughter after she found she could not talk. “My other daughter, who was away in Arizona at college, called, and, though I could hear her, I found I could not respond to her. She called my daughter who lived with me and she came home to take me to the hospital.”

She was admitted with a major brain hemorrhage and was not expected to live through the surgery. Though most of the medical experts called in for her case said they felt continuing care was a waste, Dr. Ghaly said that as long as she showed she wanted to recover, she should have continuing care and rehabilitation.
“Even my then husband (now ex-husband) was ready to give up on me,” Carmel says.

Shortly after brain surgery, Carmel suffered some complications. She had severe leg pain and the doctors thought it might be complications from her previous heart surgeries. She was transferred directly from Intensive Care to the Chicago hospital where her heart specialist took over her care. “I was pretty out of it still,” Carmel remembers. “My sister went with me in the ambulance. She kept reassuring me I was just going for therapy. In reality, I was being transferred because they thought I would need a third heart surgery. The doctor in Chicago did more tests and decided I should have the surgery in the morning. Over night a miracle occurred. By the next morning they did more tests and my heart was fine. I did not need the surgery after all. But because I was already at that hospital, it was decided I should do rehab there. So, for two months, I did therapy there.”

Carmel so wanted to recover that she began teaching herself to read and write again while still in the hospital. “I used the menus they brought each day, and painstakingly copied, printing, not cursive writing, those menus,” she says. “I still have them to this day. My printing looked like something a three-year-old child would do, but it kept getting better. I copied everything. It took a year before I could do cursive writing again. I would sit up at night and practice printing. I had to re-learn my name, and would copy it time and time again.”

Even though Dr. Ghaly was not at the Chicago hospital, he started visiting Carmel regularly. One day she showed him her name, carefully copied. “He said if I wanted to get better that badly, he would make sure there was some place for me to do rehab,” Carmel says. “He even scheduled his visits to watch my therapy sessions. He put pressure on my therapists, telling them I really wanted to improve, even when most of the medical community said I would not be able to recover from this hemorrhage.”

Carmel was sent home to recover more, spending time as an outpatient at a local hospital doing therapy. “Dr. Ghaly actually found a hospital/therapist who would send a car to pick me up for therapy because I could not drive and my family had to return to work.”

Carmel learned how to walk and talk again, making slow but steady progress. “A friend who was a teacher tutored me three times a week, using flash cards that she used to teach children to read,” she recalls. “I still have those cards, and today use them to help my grandson learn how to read.”

Then, several years after the brain hemorrhage, Dr. Ghaly asked Carmel if she would like to learn to use a computer again. “He sent me to the Rehabilitation Institute of Chicago for that,” she says. “I had already re-learned how to drive, using the church parking lot after services on Sunday. I could drive a little locally, but not into Chicago, let alone downtown Chicago. My children were so good at helping me re-learn things. They taught me how to drive again, and helped with the alphabet and writing.”

But Carmel’s sense of direction was not good any longer, and she was afraid of getting lost. “So I learned how to get to the train station,” she says. “I drove to the station, took the train to Chicago, and then took a cab to rehab. I used a walker at first, then a cane. On the way home, I would have to ask the conductor which train went to Orland Park, but I got there and back. That’s how important rehab was to me!”

The emotional toll of recovery was high. “It was very frustrating, and I would often sit there and cry,” she said. “Later, Dr. Ghaly asked me to counsel some of his patients who had suffered the same kind of hemorrhage. I remember sitting there and talking with them, and both of us crying. It’s still very emotional for me to talk about what happened. I’m only here because of Dr. Ghaly. Every doctor was ready to give up on me. He was the only one who saw any hope. It’s like God is watching over Dr. Ghaly
so Ghaly can watch over his patients. I know Dr. Ghaly gets into a lot of trouble with the medical community because he’s doing the right thing. I would be dead except for Dr. Ghaly’s faith in me.”

Being able to read again has been an ongoing challenge for Carmel. “I volunteered to do some filing for a doctor, just to learn the alphabet again,” she said. “Someone was watching over me at first, or they never would have found those files! My children made a huge poster with the letters on it, so I could learn them again.”

Carmel was a court reporter and was forced to retire because she still has trouble with reading. But today, few would see anything unusual about this vibrant woman who so obviously dotes on her grandson, a delightful little boy with the unusual name, Oz. “I still enjoy books,” she says. “I just listen to books on tape! I’ve found ways to overcome any deficits. I tell anyone that they have to try. If they want to get better, they have to try. Be positive. You may never be quite right, but you will get better than what you were after the hemorrhage or surgery. Practice by yourself, with your family, or with people you trust. It will come back to you.”

MICHAEL N.

41 year old man who was working in construction in the early morning and fell down from 30 feet on his skull on 2005. He fragmented his skull against the cement and caused massive bleeding under the skull. He was taken to emergency room unresponsive with dilated pupils. He was rushed to surgery, the hemorrhage was stopped and removed, and the skull was reconstructed together with screws. He remained in a coma; the brain pressure ICP was high and required intensive care management. He also suffered from skull fracture, spine fractures, and bony pelvis fracture and rib fracture with air in the chest. He was placed in a machine to breath and feed. He was taking 5 antibiotics. He gradually woke up in one month, he was transferred to rehabilitation, walking. He was required to be seizure medications. The feeding tube was stopped and he ate normally. He did not require assistance to walk or be supervised. He made remarkable recovery with not much significant deficits. He lives with his wife and children and returned to word. He then had two more babies and continues to raise 6 children.

Michael N. suffered a brain injury and hemorrhage in 2005 when he fell from a roof he was working on as a roofer. “The ladder I was on slipped, and I fell off a store roof on to concrete,” Michael remembers.
“I broke my back and had a brain hemorrhage. If Dr. Ghaly had not been at the hospital when I was brought in, I surely would have died. Even then, Dr. Ghaly only gave me a 20 percent chance to make it. Today, after lots of therapy and care, I’m doing great.”

Michael is still on total disability because of persistent seizures, and takes a lot of medication to control seizures, but he is enjoying life and has hopes to be able to wean off the medication.

Michael was in a coma for two months after Dr. Ghaly did surgery. “I do remember waking up as a kind of slow process,” Michael says. “I was in and out of it for some time. But I finally came to.”

Recovery was difficult for Michael, as he had to start from the beginning and re-learn speech, writing, and language. “I remember being in rehab and being amazed how hard it was to screw little nuts onto bolts,” he laughs. “I know my family went through an awful time. At the time of the accident I had a newborn baby at home, for a total of seven children. My wife had to raise two babies!”

Michael says anyone faced with a similar diagnosis should be prepared for a long, hard recovery. “You’ve got to be strong,” he says. “Have faith in God and hope for the best. Pray all the time. God must have been looking down on me and saying you’ve got too many kids to leave with your wife. You’ve got more to do.”

Michael says life is good again. “I still play catch with my kids and I garden,” he says. “I just do it all slower now.”

**ROBERT F.**

Robert F. fought a long battle to overcome the affects of a brain hemorrhage, only to die from complications of his medication prescribed for rheumatoid arthritis (RA). His wife, Alice, tells his story.

“We lived a medical nightmare,” Alice says. “Robert’s brain hemorrhage was brought on by the medication coumadin. We brought him to the emergency room after a fall. He saw Dr. Ghaly, who said he did not think Robert would survive the surgery for the brain hemorrhage. Dr. Ghaly credits his survival with medication the nurses gave him in the ER. We were so relieved that the day after the surgery there appeared to be no mental deficits.”

Robert worked hard for six months to overcome the brain hemorrhage’s affects. He spent that time in physical, speech and other therapy sessions, slowly regaining his former life. “He was doing so well, but his RA was so severe,” Alice says. “And then he started developing some strange symptoms. He had trouble breathing, and was coughing up a lot of mucus. His pulmonary physician said it was not pneumonia, and he cultured the mucus. The mucus just kept getting worse. He was just starting to walk again when he developed cystoplasmosis as a result of his RA medication. He worked so hard to regain it all, and then to have him die of side effects of his RA medication was so cruel.”

Alice does not blame Robert’s doctors. “All his doctors knew something was not right, but they could not tell what it was,” she says. “They just kept testing for other conditions. Eventually I had a friend who was on the same medication, and she told me about the side effects she was having. I actually told the doctors here in the ICU about my suspicions. I blame the drug companies for his death.”
Communication between Robert’s primary care physician and specialists was a problem for Robert and Alice. “I actually had nurses and specialists tell me what was being done for Robert was wrong—always with the caveat that ‘you didn’t hear it from me,’” Alice says. “It’s important to get a good network of doctors you can trust. Dr. Ghaly has his own way to doing things and demands the best from everyone involved in the care of his patients. I think he’s probably not very easy to get along with, but with good reason. It’s a crime that the hospitals don’t always appreciate him. Find a doctor like Dr. Ghaly, one whose whole life is his patients. I never met a patient who did not adore him.”

Alice looked into pursuing a lawsuit over her husband’s death, but was told because he was 77 at the time of his death that the suit would probably not be successful.

“I would do it all again,” Alice says. “If he had wanted to climb Mt. Everest, I would have pushed him up there. I treasure every day we had together.”

CONNIE P.

42 years old, presented with headache, confusion, numbness and weakness in the right side of the body, after a fall one month earlier. A CAT scan revealed a large brain hemorrhage in the left side. She required urgent surgery to remove the blood clot. After surgery she had a turmoil course in ICU where she had seizures and required resuscitation. She recovered and went for a short rehabilitation and went home. She returned to work and is doing well six years later with minimal complaints. Her husband and her children were at her bedside every day and were part of her recovery and care.

Connie P. had brain surgery for a brain hemorrhage from a subdural hematoma in 2003. Some time before the surgery she had fainted. The cause of that incident was never determined, but it is assumed that the resulting fall created a brain injury which then took several weeks to develop.

“I went to our local urgent care center at about 4:30 p.m.,” Connie recalls. “They did a CAT scan and found the bleed. I called my husband, and within the hour I was seeing Dr. Ghaly. By 7 that night I was in surgery.”

Dr. Ghaly said he could not believe Connie was still alive with a bleed in her brain that deep and large. By 1:30 in the morning Ghaly had come out to talk with Connie’s husband and tell him how the surgery had gone. The surgeon said the bleed was probably an old bleed because the blood was gelled.

“I remember waking up because I had to throw up,” Connie says. “I saw my husband and a friend and her husband, but then I was out again until the next morning. I really don’t remember much about my hospital stay. I was in the hospital for 12 days, and then in rehab for 11 days, all day, as an outpatient. I did some physical therapy, but most of my problems were cognitive, with speech, writing,
and especially memory. I literally did not know who my children were. They were 11 and 13 at the time. The whole next year was pretty tough for them.”

Recovery was a real struggle for Connie. Her speech was slurred and she often repeated herself. “The doctors could not guarantee me that these problems would pass,” she says. “Within six weeks I was somewhat better. At least I could remember who my children were. Six months later I was ever better. I still have some mental deficits. I probably can’t multi-task as well as I once could, but I’m doing well now. It took a while, about two years, before I was close to normal.”

Connie says that doing whatever it takes to make you well again is the key to recovering from such an injury. “You need to do whatever you can to make yourself better,” she says. “You need to push yourself. I did whatever they prescribed for me—from therapy at home to exercise. I did everything they told me to do. You just can’t lie around and think this is it. You have to get up and do it. Also, be prepared to have to start from square one. It will be like you’re a little baby again. But that’s OK as long as you progress from there.”

Connie says the entire medical community worked hard to bring her back to her normal life. “I never had a bad experience, from the testing facilities I went to, to the therapists, they were all fantastic,” she says.

“I especially credit Dr. Ghaly with my recovery,” Connie said. “We just love him. He called me at home to check up on me, and was aggressive in his treatment and testing. I have referred others to him, and they all love him. There should be more doctors like him.”

SAMANTHA W.

She presented to the perinatal clinic in 34 weeks of gestation, with her second baby pregnancy with blood pressure high in 150’s systolic and 90-100 diastolic. The baby was monitored and was OK. She was admitted to the hospital but the blood pressure continued to increase until the middle of the night where she went to coma and seizures. Doctors suspected toxemia of pregnancy. She went to the surgery and had emergent delivery of the baby by caesarean section. At 5am after caesarean section, she did not wake up. A CT scan of the brain showed large brain hemorrhage from the high blood pressure and the brain is strangulated with high pressure. A neurosurgeon was called. The husband and family could not believe she went from a simple clinic visit to near death all within 24 hours. She was given no chance to live; she was unresponsive and massive brain hemorrhage. She went through surgery, the hemorrhage was removed and controlled, drain was placed and then transferred to intensive care unit. She gradually improved through three weeks and had secret signals to her baby during her recovery. In three months she was totally functional and in one year she is back to work and normal life as if nothing happened. It is only a miracle and determination by her and her husband and family, of not giving up and stand in faith despite the pressure “to let her go” because of quality of life. 5 years later, she continues to be well and celebrate the birthday of her child.

Samantha W. was pregnant with her second child when her blood pressure reached dangerous highs and she was admitted to the hospital. She had driven herself to a regular doctor’s check up and was sent directly to the hospital. She was in her 34th week of pregnancy.
“That night I felt severe pain in my stomach and went into a seizure,” Samantha says. “They delivered my son by a Caesarian section. He was fine, but I lapsed into a coma. Then I had a brain hemorrhage and ultimately had brain surgery. I was in a coma for 12 days.”

Samantha was unresponsive and had never seen or held her infant son. Dr. Ghaly decided that she might be responsive if she was allowed to hold her son, so he had her wheeled down to the nursery, and had her son placed on her chest. The baby knew this was his mother, and responded to her, though Samantha did not respond at first. Then, slowly, she began to respond to her baby.

When Samantha came out of the coma, she was paralyzed on her left side. Samantha remained in the hospital for about a month, and then was transferred to Marianjoy for rehabilitation.

Others at the hospital felt there was no hope of Samantha’s recovery. At the time of surgery, most medical specialists there gave her no chance of living through the surgery. But she amazed everyone and lived-and recovered! Today she is back to normal, living life to the fullest. Each Christmas she delivers a special gift to Dr. Ghaly as thanks for her life.

“I tell people to never give up hope, to have a doctor like Dr. Ghaly who will not give up,” she says. “There were several members of the clergy there during my surgery, because they thought I would not make it. But never give up hope. No one expected me to live, only Dr. Ghaly had faith, and I’m very thankful for that. As long as there is a spark of life, there is hope.”

STEVEN S.

A 25 years old male studying to be a personal trainer living by his sister and working a part time job, hard working got involved in a car accident early morning in 2007. He was rushed to emergency room. He had a childhood seizure for which he was taking medication. The car was towed and the injury was so severe. He had large brain hemorrhage, skull fracture, brain swelling. He was not able to breathe and went into coma. The paramedics could not intubate him or make a hole in the neck for him to breathe. His eyes were dilated and was unresponsive, there was no chance for him to live. He was rushed to surgery and the brain hemorrhage was removed, the laceration was repaired. Simultaneously, the trauma surgeon repaired the perforated bowel. He had terminal seizures and was transferred to intensive care unit. He was in shock for two days with blood pressure 60/30 despite the vasoactive drugs. He had two chaplains to be ready for his expiration. The parents came immediately from two hours away and did not leave his bedside. He was placed in machines to support his breathing and circulation. Bleeding was coming from many orifices and his lungs were contused and bruised. Despite many ideas, the parents had the vision that he will recover. Two more brain surgeries were done, one of them where half of the skull was removed and placed in the abdominal wall to relieve the increasing brain pressure. He had infection in the abdominal wall surgery that was disfiguring to him. His initial Glasgow score was 3 out of 15, which is equal to death. Four weeks later he went to rehabilitation and 2 months later the bone flap was placed back in his head. He is totally independent and talking and caring for himself and carrying very much intelligent conversation. Two years later he is looking for a job and he is back to himself and his personality. The dedicated family has been at his bedside, they did not leave his sight, writing daily dairy with his progress and taking pictures. Many lessons were learned and many experiences shared. It is an inspiration to many that had seen and witnessed this miracle. Recovery could
not be done without his family; his family was the rehabilitation that he needed. Patience and keep trying and pushing for more recovery was everyday challenge.

Steven S. suffered a major brain injury in an automobile accident. A recent college graduate, he was driving when his vehicle hit a tree. Steven’s parents were told there was no hope of his recovering from his major injuries, and again the clergy was called. Steven had four brain surgeries and remained in intensive care for three weeks. He was in a coma for two weeks and paralyzed for five weeks.

The medical community told Steven’s parents there was no hope of his recovering much use of his body, that he would remain in a paralyzed state. But Dr. Ghaly and Steven’s parents would not accept that, and vigorously pursued rehabilitation for Steven. Through much physical therapy, Steve began the long road back, and today, he lives a normal life. His only remaining deficit is some trouble with choosing words, and that is getting better each day. He says he doesn’t remember much about the accident and his recovery and his parents say that may be a good thing. They remember each painful step all too well!

SHANNON L.

SHANNON L.

19 years old, was involved in a semi-fatal car accident with severe concussion to the brain, which put her into a coma from traumatic brain injury. She also had fractures of her ribs and lacerations. A monitor was placed in her head to monitor brain pressure and measures were taken to decrease the pressure inside the brain. She had multiple foci hemorrhages scattered in the brain. Gradually she was able to wake up and was sent for short-term rehab. Currently she is back to school and doing well three years later.

Shannon L. was just 17 when she was involved in a car accident with a semi truck. She suffered a brain hemorrhage as a result. Her mother, Rita, tells her story. “I got that phone call in the middle of the night that every parent fears,” Rita recalls. “By the time I got to the hospital, Shannon was having a CAT scan done and the clergy was already there. I was in shock. By the time I got to see her, Shannon had a huge gash on her forehead and was on the way in to surgery to close it. I only got to see her briefly.”

Shannon was in a coma for several days, and then started to come out of it. The first day she was in and out, and then started to come around more. “Dr. Ghaly kept pretty close eye on her,” Rita says. “He’s such a wonderful man. After seven days he said she had to get up and moving. She was then transferred to the Rehabilitation Institute of Chicago, where she was for about two weeks. We celebrated the holidays there, where she was having daily therapy.”

Dr. Ghaly says Shannon is ‘an absolute miracle’, but her mother credits Dr. Ghaly with performing the miracle. “All she has to show for it is a small scar on her forehead,” Rita says. “She was back to work six weeks after the accident. She still has some short term memory issues, but that is getting better now.”

Looking back on the experience, Rita says to keep your faith in God. “It was my faith that kept me going,” she said. “You’ve got to hang in there. Things always look better in the morning. Some
amazing things can happen, it just takes time. We had so many churches praying for Shannon, and our family members were great. But I give all the glory to God and Dr. Ghaly in her recovery. Shannon should really be dead, but here she is, back driving and back to normal life. All these amazing people came together to direct her care and make her better. She’s just a miracle!”

ZORA P.

83 years old, presented with brain hemorrhage that caused a sudden onset coma in the middle of the night. Despite opinions from other physicians and staff, her daughter agreed with the neurosurgeon to have aggressive treatment to give her a chance. She was rushed to surgery in the middle of the night. The hemorrhage was removed and the pressure was monitored by a pressure monitor. She was placed in ICU and remained in a deep coma for a few weeks. Then she began to awaken and went home six months later. Through this time her daughter ‘fought the system’ and ignored all the negative comments about the likelihood of her mother’s recovery. She was determined that her mother would recover. She was the main caregiver for her mother. She was aggressive and demanding of excellent care for her mother. Zora lived three more years. After her death, her daughter still greaves from losing her and the wonderful three years they had together.

Her devoted daughter, Nada, tells Zora’s story. “While talking with my mother on the phone in 2004, she suffered a brain hemorrhage,” Nada says. “She told me her hand just fell down, that she could not move it back up. I told her not to move, that I would be right there. Thankfully, I was only five minutes away from her. On the way I called the paramedics, who got there about the same time I got there.”

Zora was lying on the floor, slurring her words, but it was clear she was saying, “help me, help me.”

Zora was taken to a local hospital, and once her condition was assessed, she was transferred by air to another hospital better able to treat her. “We were blessed to meet Dr. Ghaly who was on staff,” Nada says. “He told me ‘Your mother will come back, but to what extent we do not know now.’”

Dr. Ghaly did surgery to relieve the pressure and clear the blood from Zora’s brain. The next day the doctor and her daughter were encouraged that she could wave at them. But by the evening, her response was less strong. Dr. Ghaly ordered an EEG to check for brain activity and found Zora had suffered a major seizure. She was put into a coma, where she remained for three months.

“She was sent to an acute care facility, where she stayed for the 40 days her Medicare would cover,” Nada said. “I learned a lot about Medicare during this experience!”
Nada visited faithfully every day, talking to her mother and making sure Slovenian music was playing to remind her of her past. Then she was sent to a nursing home.

“Finally, after many days, she started to come around,” Nada says. “Then I felt she should be getting more aggressive therapy, so she was transferred to a nursing home with an agreement with Marianjoy for rehabilitation. She spent three months there.”

Zora eventually started speaking again, long after her stroke. “It just took a very long time for her brain to come back,” Nada says. “Once her Medicare was exhausted, she was transferred back as a permanent resident to a nursing home near me in Aurora.”

Zora did have several setbacks, including contracting pneumonia and having an open sore which was slow to heal, but she continued to enjoy life for three and a half years before she died as a result of another major brain hemorrhage.

“Dr. Ghaly told me a second stroke would happen, but he said that if my mother wanted to live, she could recover from the first stroke,” Nada says. “Others in the medical community wanted to just give up on her, but Dr. Ghaly said her brain was not ready to give up yet. So, I fought for her. Dr. Ghaly said it would be the ‘will of God’, and it was. I’m very grateful to him for giving me three wonderful years with my mother. It was a blessing for me to be able to take care of her. She came around and knew things from her childhood. Her short-term memory was not so good, but it was a blessing for both of us. It gave me a chance to enjoy her to the fullest. I was there at the nursing home for her dinner every night, and we laughed together. She loved to laugh.”

Nada tells those faced with a loved one with a similar diagnosis to never give up. “Don’t give up,” she said. “Be determined. Nobody wants to die. She wanted to live, even if she was 100 percent dependent on others for her care. You have to fight for your loved ones. Question everything, always ask questions. Learn whatever you can about their condition. Take care of them! They need you most during this time.”

**DUANE D.**

43 years old, presented with uncontrolled very high blood pressure that caused a brain hemorrhage and put him into a deep coma. His heart and kidneys suffered from the high blood pressure. He was diagnosed with stroke and hemorrhage. At the bedside in the ICU an emergency drain was placed in the front of his head and brain, called external ventricular drain. He remained in coma for 10 days. Other physicians were consulted, such as neurologists, cardiologists, and pulmonary specialists. He recovered and was sent to rehab and did well and continued to live and try to control his medical conditions.
Duane D. had a brain hemorrhage in 2002, caused by uncontrolled high blood pressure. He was brought to a local emergency room and then airlifted to another hospital, where his care was taken over by Dr. Ghaly. Though Duane did not require surgery, he spent three months in the hospital. “I was kind of loopy at times, but I never really was in a coma,” Duane recalls. “I suffered from seizures, and had a lot of rehab. My only deficit today is some short term memory loss.”

Still on blood pressure medication, Duane is currently awaiting a donor kidney for a transplant. He’s on dialysis because the blood pressure damaged his kidneys. “I believe God will have someone donate a kidney for me,” Duane says.

“I would tell anyone faced with a similar diagnosis to trust in God, Duane says. “God and my family were a big part in my recovery. They were always there by my side. I saw a lot of other patients who did not have family, and that was difficult. And, of course, have the best doctors. Dr. Ghaly was the best!”

JAMES S.

52 years old, presented with infection in the spine caused by bacteria that came through the skin and probably the insulin pump he used to control his diabetes. He suffered previously from stroke and heart attack and high blood pressure. His condition is called thoracic epidural abscess. He was also on blood thinner, called Coumadin. After reversing the blood thinner, he was rushed urgently for surgery to drain the infection in 1999. Eleven years later he continues to do well and managing and control his underlying medical conditions.

James S. has had several brushes with mortality, but today he is retired and “I’m ‘lovin life,” he says James was in Missouri for a bass fishing tournament when he suffered a brain hemorrhage. He says he was totally out of it for two months, and not very clear as to what was happening around him for an additional two months. “I surely would have died if not for my wife,” James says. “Then when I was returned to this area, my wife located Dr. Ghaly. It was a good thing because I was soon faced with another challenge.”

James noticed he had pain in his back, and went to a chiropractor who adjusted his back. But the pain worsened, so he returned to the chiropractor, who noticed his back was very warm. He sent James immediately to the hospital, fearing he might have a potentially fatal condition.

“I was pretty out of it for several days, James says. “But my wife tells me Dr. Ghaly saw me and wanted to do some sophisticated tests, not available at that hospital. So I was transferred by ambulance to another hospital with a more advanced MRI system to try and find out what was causing all my back pain. Ghaly had originally said he would do an exploratory surgery the next day, but once the results of the advanced MRI came back, Dr. Ghaly called in the surgical team and said they needed to operate right then. I had a staph infection my spine, and Dr. Ghaly was afraid if it waited any longer I would be paralyzed. In fact, one leg was already paralyzed.”

It took some 5-6 hours of surgery, but once over, Dr. Ghaly came out jubilant to tell James’ wife he could move both feet. The source of the infection remains a mystery. James is a diabetic, so he pricks
his fingers many times a day to keep his diabetes under control. In addition, he recently had his teeth cleaned. Either of these could have allowed the staph infection entry into his body.

Today, James is retired and says he is happy to be enjoying life. “I see Dr. Ghaly regularly and for many years had annual contrast MRI’s to monitor the flow of oxygen to the brain,” he says. “I owe my life to those two doctors: the one in Missouri and Dr. Ghaly. They are doctors who stand by their patients, who truly care about their patients. I have all the confidence in the world in Dr. Ghaly. I’ve never seen such a devoted man in my life.”

James says that anyone who feels numbness on one side of the body or has trouble speaking, or who has a sharp, abnormal headache, should get to the hospital immediately. It could save your life.

“I managed to continue working for about 12 years after my health issues, mostly because I worked for and with some special people,” he says. “But today I enjoy life more than ever!”

JAMES C.

Presented with hemorrhage around the brain after as fall in a nursing home. He was healthy and active and living independently until six months before the fall when he developed weakness and difficulty in moving. An extensive workup was done and ultimately he was sent to a nursing home where he was gradually improving until the fall. He was taken for surgery to remove the hemorrhage and remove the pressure from the brain. He successfully made it through surgery and started to recover. His post-operative course waxed and waned, some setbacks, some improvement. His daughter struggled with his care and his frequent re-admission to the hospital. He ultimately died in less than a year.

James C. was 85 years old and living independently in Wisconsin in March 2007 when he suffered a case of shingles. That brought on a mild heart attack and he was moved to a nursing home. His daughter, Nancy, lived far away in Aurora. She was concerned about his care and convinced him to move closer to her home in order for her to be able to monitor his care until he was recovered enough to return home. Nancy picks up his story.

“My dad was in the hospital for some 10 days, and when I picked him up to bring him to a nursing home close to where I live, my medical adventure began,” Nancy recalls. “It was like being in a country where you don’t know the language!”

While Nancy was in Wisconsin arranging for her father’s transfer, her husband visited various nursing homes and found one he thought was good. Nancy drove her father the 350 miles to the nursing home because the trip by ambulance would have cost close to $8,000. “He was disoriented and very uncomfortable,” Nancy says. “I called the nursing home when I was within 20 minutes of arrival to give them a heads up to be ready. My father needed a wheelchair and two people to help get him out of the car. When I arrived there was no one waiting for me, so I went in and talked with the receptionist. She told me to wait by the car, that someone would be out soon. Twenty minutes later there was still no help, and I went back in to see the receptionist.”
Nancy was sent back to the car. Another 30-40 minutes passed, with her father getting more and more uncomfortable. Nancy went inside once more, and was told the person who does admitting was in a meeting. “I was watching the person I loved most in the world suffering, and no one was coming to help me,” Nancy said. “Here we were in front of this beautiful, new building, but there were no nurses or aides. I was getting as agitated as my father, and decided to go find someone to help.”

Nancy was not happy, and went in search of a nurse or aide. She saw three nurses coming down a hallway and asked if they were able to help her father. “They said they didn’t like my attitude,” Nancy says. “They told me they would not accept my father—though I found later they were required by law to accept a patient who was already arranged to come to the nursing home. Finally the three told me to wait by the car, that they would change my father’s diaper, but they would not let him stay because of my attitude.”

Finally a salesperson for the home told Nancy they would take her father, but that she was on probation. “He told me ‘Let me tell you, this is not a hospital. When you push the call button it might take 20-30 minutes for a response.’ I was appalled at what he was telling me, but I had no choice,” she says.

Nancy’s father was admitted and she was able to visit every day because the nursing home was only a few blocks from her home. “Clearly his care was not going well,” she said. “After he had only been there six days he had already fallen twice. The second time he hit his head on the ceramic tile floor, though we never really found out what happened. He sustained a serious head injury and was rushed to the hospital.”

When Nancy got to the hospital she saw her father had a C-shaped cut on his head where you could see his skull was exposed. He had blood encrusted in his eyes, eyebrows, and teeth, as well as a broken nose.

Dr. Ghaly was called in because James had sustained a brain hemorrhage as a result of his fall. It took three hours of brain surgery to treat a huge hematoma on the left side of his head.

“The mystery was how he had a hematoma on the left side of his head, when the injury was on the right side,” Nancy says. “Somehow he had to have hit both sides of his head at the same time.”

Because of the severity of his injuries, Dr. Ghaly almost did not do the surgery, but he believed it was possible James might be able to recover.

“As soon as the hospital saw he was 85 years old, they wanted to give up on him,” Nancy said. “They didn’t know it had been like he was only 75 only a few weeks before. He had been active, had traveled, and drove himself all over. This was a man who enjoyed an active life.”

Then a cascade of bad things began to happen. James suffered a stroke, a series of seizures, and, finally, a terrible case of pneumonia. “Through it all Dr. Ghaly was my touchstone,” Nancy said. “He was so kind, so patient, so informative. He directed my father’s care. Dr. Ghaly called in extreme treatment for the pneumonia, including a special bed that shook him to loosen the mucus in his lungs. He made sure my father had 24-hour respiratory care. He was in intensive care for three weeks, but then recovered enough to move to Marionjoy for rehabilitation.”

After four weeks in rehab, James was released to another nursing home, one that was the direct opposite of his first nursing home. “This was just a great place,” Nancy says. “It was family owned and
they took great care of my father. But he had trouble swallowing by then, and was allergic to the
nutrition that had to be delivered through a feeding tube.”

The seizures continued to be a problem, and James developed bedsores the size of golf balls. He
was in constant pain. But slowly he was getting better and was more lucid than he had been for months.

However, seven months after the fall, James was hospitalized once more as he suffered a week
long seizure which was uncontrollable and he contracted MRSA, the antibiotic resistant strain of
bacteria often found in nursing homes and hospitals.

He was sent back to the nursing home, where he lived for almost three more months before he died.

“He was so very ill by then, and we put him under the care of hospice,” Nancy said. “I thank God
for Dr. Ghaly who kept me together during this awful experience. He was the only person who told me
the truth.”

JACK H.

Jack H presented with migraine headache for so many years. Finally he had, CT scan, MRI and the
Angiogram of the brain and showed large blood vessel tumor on the right side called arteriovenous
malformation and large brain aneurysm. The aneurysm was large 2.5 centimeter and can hemorrhage
and cause immediate death. He was taken to surgery and had the aneurysm clipped and did great. Then
the AVM was emblazed with particles and glue through the angiogram port in the groin several times to
block all the blood vessels and then he went for radiation. Ten years later he continue to do well with no
recurrence. From diagnosis of migraine headache to find out he has two major vascular problems in the
brain, took care of them and no more headache and he lived happily with his wife and children. His faith
and goodness are inspiring.

Jack H. had surgery for a brain aneurysm in Sept. 2000. “I probably had the aneurysm for many years,
but did not know it,” says Jack. “I had suffered with very severe headaches for years, and had seen many
different doctors for them. Everyone told me they were migraine headaches. But then, quite by
accident, I saw another doctor, a substitute who was seeing patients for my regular physician. She
recommended I have a CAT scan. I had never had one before that. She was surprised I had not had one
before then.”

Dr. Ghaly was the neurologist on call when Jack had his scan, and it was Dr. Ghaly who read the
scan.

“Dr. Ghaly came out of the room with another doctor, and he looked at me strangely,” Jack
recalls. “I thought maybe I hadn’t dressed right or something. Dr. Ghaly came up to me and said ‘You are
not well.’ I told him I had to go to work. But I thought it was strange that he told me not to exert myself-
not to be stressed or angry. And that he needed to see me and my family in his office the next morning
at 8 a.m.”

Dr. Ghaly had found the cause for Jack’s headaches: a brain aneurysm.

“I have to say, throughout the entire ordeal, I was never worried,” Jack said. “My family was
worried. And Dr. Ghaly was worried. In fact I was relieved, thinking they could finally do something
about the headaches.”
Surgery was scheduled. “Right before surgery, I remember Dr. Ghaly coming in and telling me he would do everything he could,” Jack says. “I told him everything would be fine. I just had this overwhelming feeling it was going to be fine. And it was!”

The surgery was successful and Jack remembers waking up and feeling great. He says it was the first time he awoke without a headache in years.

But Dr. Ghaly found another problem at the rear of Jack’s brain. He had AVM, an anterior ventricular malformation, which required him to go to Chicago once a month for embolization for 11 months as they inserted a kind of ‘glue’ into his brain to fix the AVM. Then he had gamma knife radiation surgery.

“The initial surgery never bothered me,” Jack says. “But the embolization did. I always got a terrible neck pain after the treatment. Now I’m back to normal, except my vision was affected, I think because the aneurysm laid on the optic nerve. There doesn’t seem to be much they can do about the vision, but I’m seeing Dr. Ghaly again. The good Lord was good to me. God guided Dr. Ghaly’s hands.”

Jack says he credits his recovery to Dr. Ghaly, God, and the help of his family. “The support of my family was important,” he says. “My wife, four children, and then three grandchildren were all by my side. Dr. Ghaly had all of them in the room. There was a room full of people there. It was great.”

Today, Jack enjoys his family and grandchildren, who now number 10.

JIM C.

Jim C. suffered a brain hemorrhage and is in a coma at this time. His wife, Sandy C. had been a patient of Dr. Ghaly’s, some five years ago.

“One day Dr. Ghaly called me to see how I was doing,” Sandy says. “I told him I was fine, but Jim was in bad shape. Jim had been ill for six months, but no doctor had been able to diagnose what was wrong with him. He had lost about 100 pounds and suffered from nausea, fatigue, and muscle pain. Dr. Ghaly told me to bring him to his office immediately—that Dr. Ghaly would see him.”

Dr. Ghaly ordered more tests and, finally, they found Jim had been suffering from an undiagnosed staph infection. Dr. Ghaly referred Jim to a cardiologist, who found the infection had affected his cardiac valves, necessitating open heart surgery to replace the valve. Jim went through the surgery and was doing well, and was sent home. The next day, Jim woke and rose up from the bed and complained of an awful headache. Sandy went to get some Tylenol for him, but when she returned, he was unresponsive.

“I called the paramedics and Dr. Ghaly immediately,” Sandy recalls. “They took Jim to the hospital, where the neurologist said Jim had a brain hemorrhage and required brain surgery. Dr’ Ghaly could not operate at that hospital, so he told me to let them do the surgery, or Jim would surely die.

“During the surgery, some woman in a white coat came out and told me that the Jim I knew no longer existed. After the surgery, a big meeting was planned, and they were asking about using Jim’s organs. The day before that meeting I had talked with Dr. Ghaly and he told me they were going to let
Jim died. That’s just what was happening. So Dr. Ghaly arranged to have Jim transferred to his hospital. Jim was in a coma, and Dr. Ghaly said he would take over his care. I would not have it any other way. Dr. Ghaly has been Jim’s angel. Who are we to tell Jim he doesn’t have a life.”

Jim has been in a coma since July 2009. He has been transferred to a long-term care facility where Sandy visits each day and spends time talking with him. Recently, Jim started opening his eyes and trying to focus. “I got his eyeglasses and put them on him, and now he’s trying to focus on things even more,” Sandy says. “I tell everyone to hang on to hope. Nobody knows about coma patients. Jim is at a rehabilitation hospital now, where they keep stimulating him. We put headphones on him and play music or tapes of his children. My kids say ‘Wake up daddy, we need you home.’”

Jim’s six-year-old son helps with his physical therapy. “Nicholas cries when we leave the hospital,” Sandy says. “He tells me he cries because daddy is not leaving the hospital with them. I tell him we’re going to wake him up some day.”

Sadly, it is the misdiagnosis that has caused such terrible consequences for Jim and his family. If the staph infection had been diagnosed earlier, before damage, it would have been a simple cure of only a few weeks of antibiotics. “I tell everyone to never give up,” Sandy says. “Don’t give up hope. And remember: an ounce of prevention is worth a pound of cure! Get the right diagnosis—and keep seeking answers until you do!”

REBECCA S.

A 26 years old female suffering from migraine headache since childhood. In 2009, she had a different but severe headache, she went to ED and MRI was suspicious for an aneurysm, which was confirmed. She was told she could just follow it up. She knew better. She knew a relative that died from brain aneurysm. She wanted to be taking care of it. She had a three year old and a lot to lose by not controlling her health. She was advised to have the aneurysm coiled but she decided against the coiling because she read the literature correctly. She underwent brain surgery and the aneurysm was permanently clipped. She did great and no more fear. She found a job and is trying to stop smoking. In her past she was exposed to violence, but now she is reflecting in the new lease in life and happily that the aneurysm was clipped. She hardly takes any medication.

Rebecca S. had surgery for a brain aneurysm in August 2009. She says she suffered from what other medical professionals had told her were migraine headaches every day for some three months. She had been in and out of emergency rooms at various hospitals. “In addition, I was over-medicated on 11 different drugs,” she says. “I work with booking bands for musical events, and a guitar player finally told me about Dr. Ghaly. By the time I saw him, and had more tests, I was told to go home and make funeral arrangements because there was little chance I would make it through the surgery. Dr. Ghaly told me to be prepared for memory loss, loss of speech, hearing and/or sight, and the very real possibility I might end up in a vegetative state.”

Rebecca says she had surgery on a Friday, and was pretty out of it until Sunday, when she recalls regaining consciousness and being amazed she had no deficits. “Dr. Ghaly had told me recovery could take three months to a year, but I was released after only three weeks and shortly after that I was back to work and driving again. Dr. Ghaly is a miracle worker. If I had not found Dr. Ghaly, I would not be here today! He saved my life!”
Today, Rebecca is back to normal and her future looks bright. “I was told I would have an angigram a year after surgery, and if that was clear, not again for five years. I tell anyone faced with a similar diagnosis to keep your head up. Spend as much time as possible with friends and family. Don’t go into surgery with any regrets about something you did not say and wanted to say to them. Dr. Ghaly called me everyday to see how I was doing, both before and after surgery. He truly cares about his patients. Now I’m just waiting for my hair to grow back!”

ANNA B.

Anna B. was one of Dr. Ghaly’s patients when he was a resident. She suffered from a giant aneurysm in her brain and had several surgeries to fix and remove it. During surgery her blood pressure dropped and surgery had to conclude. Another surgery was attempted, but the aneurysm burst, in essence causing a stroke.

Anna spent 10 years in a nursing home with major deficits in cognition and motor skills. She was eventually placed under hospice care, but became stable enough to return to the nursing home.

“My mother’s condition declined over time, and now a smile would be a good day,” says May Ann, her daughter. “But Dr. Ghaly became a trusted friend. He really does care about his patients, and he is a doctor who also cares about their family, what they think, and what they see in the patient. Even today we always go to him when we need advice. He is still someone we can trust.”