



- **Removing a Tumor in the Brain - Via the Base of the Skull**
- **Breast Cancer Innovations and Compassionate Care**
- **New Program Meets South Florida's Need for Life-Saving Transplants**
- **Advances in Mammography: Fighting Cancer in 3D**
- **Novel Transplant Brings Life - Changing Relief from Pancreatitis**
- **Advancements in Spine Surgery for Degenerative Disease**

Removing a Tumor in the Brain - Via the Base of the Skull

When Charles McDougall, 75, of Hollywood, FL, started feeling dizzy earlier this year, he had reason to suspect a brain tumor was the cause. He was right.

"Neurosurgeons at Cleveland Clinic Florida were able to remove most of my brain tumor almost eight years ago. But at that time, it was too dangerous to remove all of it. I suspected my new symptoms were related," he says.

An MRI confirmed that the tumor had grown. Not only was it wrapped around both optic nerves, affecting his vision, but also the carotid artery—the main source of blood and oxygen to the brain. "I thought I was in for another big surgery and another month-long hospital stay."

Thankfully, he was wrong about that.

"Over the past 10 years, we've greatly improved and perfected our techniques in skull-base surgery," says Badih Adada, MD, a Cleveland Clinic Florida neurosurgeon and expert in performing microsurgery in the brain. "We reach tumors via the base of the skull and under the brain, so there's less risk of damage to the brain, blood vessels and nerves. But these are challenging surgeries to master and perform, and few centers have this level of expertise."

At many other hospitals, a tumor like Mr. McDougall's might have been inoperable, Dr. Adada says. Instead, radiation would be the alternative. And the treatment goal would be to control the tumor rather than remove it.

Though Mr. McDougall's tumor was benign, meaning it wouldn't spread to other parts of the brain or body, its size and growth caused it to push on brain structures inside the skull. Dr. Adada encouraged him to have the surgery immediately.

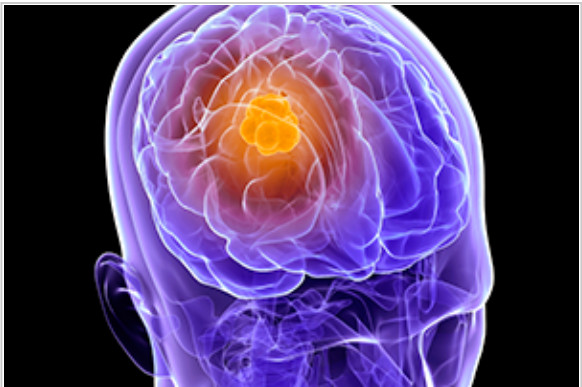
"It was a big decision, especially considering how long recovery took the first time I had brain surgery," Mr. McDougall says. "But Dr. Adada gave me and my wife such a feeling of confidence. And we've both been amazed by the results. It was an incredible difference compared to the first surgery."

After the recent 10-hour operation, Dr. Adada shared unexpected news; he was able to remove the entire tumor. Mr. McDougall was cured. "When Dr. Adada told me that, he had the biggest, broadest smile I've ever seen," Mrs. McDougall says. "He was so happy for us."

Mr. McDougall returned home just three days after surgery. Weeks later, he and his wife are talking about returning to their weekly swing-dancing dates.

"From Dr. Adada to all the nurses, physical therapists and other caregivers, everyone was brilliant," he says, speaking just weeks after the second surgery. "If they can take care of a large tumor inside of the brain like this, I wouldn't hesitate to come here for anything."

- **Return to Top**



Breast Cancer Innovations and Compassionate Care

When Peggy Johnson first moved to Delray Beach, FL, a neighbor told her, "If you ever need cancer care, Cleveland Clinic Florida is the place to go." The advice was timely. "I found out soon after that I had breast cancer," she says. "I was in shell-shock." But over the next weeks, her medical team confirmed that the neighbor was right about where to seek care.

"The field of breast cancer is advancing rapidly," says Thomas Samuel, MD, a Cleveland Clinic Florida medical oncologist who specializes in breast cancer. "We regularly review and share the latest published research, so everyone on the team knows what's new and promising."

Cleveland Clinic Florida is involved in clinical trials as well. "In one study, we're researching ways to activate the immune system, so the body can fight off and destroy cancer cells itself," he says. Other innovative treatments are also being offered to patients, such as one of the newest cancer-fighting drugs, one that targets how fast cancer cells grow. "In addition, we're watching other exciting drugs that have fewer side effects than chemotherapy, and drugs for people with advanced breast cancer who have limited options for treatment," Dr. Samuel says.

To create an individualized treatment plan for each patient, a broad range of experts work together in what's called a "multidisciplinary approach." To help facilitate communication and care, a recently completed five-story building brings together all elements of cancer services. Mrs. Johnson, 66, benefitted from this range of services. With a mastectomy and chemotherapy now behind her, she's taking a special drug that targets her specific type of breast cancer to prevent recurrence. Through it all, she consistently found comfort in the personal attention from her team at Cleveland Clinic Florida.

"They're very good to me, very good," she says. "Throughout all my care, they've encouraged me to call or text them with my concerns, and they reply quickly to let me know if my symptoms are normal or not, and what to do about them. They make me feel like I'm their top priority."

With a team of compassionate cancer experts, providing care in facilities that make treatment more efficient, Cleveland Clinic Florida keeps the patient front and center.

"There's always something new on the horizon," Dr. Samuel says. "We're looking for better therapies every day, hoping to both improve quality of life while meaningfully extending the life of each of our patients."

- [Return to Top](#)

New Program Meets South Florida's Need for Life-Saving Transplants

Cardiomyopathy refers to diseases of the heart muscle. As the condition becomes worse, the heart is less able to pump blood and keep a normal rhythm. This can lead to heart failure, serious damage to heart valves and even sudden death.

Cleveland Clinic Florida's new Cardiomyopathy Clinic offers treatments for both mild and serious forms of cardiomyopathy. With a focus on preventing the condition from worsening, treatments benefit patients by controlling symptoms and improving their quality of life.

"One goal of this program is to identify patients who have any form of cardiomyopathy, so we can intervene in ways that allow the heart to function normally," says Cedric Sheffield, MD, cardiothoracic surgeon and surgical director of Cleveland Clinic Florida's heart transplant and mechanical assistive device program.

"We first try lifestyle changes and medication. When that approach is not effective, we offer advanced surgical options." Such options include implanted devices that help the heart pump and keep a normal rhythm, as well as heart transplant.

The most common types of this condition are dilated cardiomyopathy (causing an enlarged chamber of the heart), hypertrophic cardiomyopathy (the most common cause of sudden cardiac arrest in young people), restrictive cardiomyopathy (when abnormal tissue replaces heart muscles, mostly in older people), cancer chemotherapy-induced cardiomyopathy, and arrhythmogenic right ventricular dysplasia (a rare type that causes serious, irregular heartbeats).

"To identify the cause, type and seriousness of the condition, we use diagnostic tools such as, genetic testing, echocardiograms, heart MRI and biopsy," says Yordanka Reyna, MD, a Cleveland Clinic Florida cardiologist and heart failure specialist who sees patients at the new Cardiomyopathy Clinic. "And our physicians subspecialize in a broad range of heart-related care. So no matter what the cause or how serious someone's cardiomyopathy is we have the expertise to treat them."

At the Cardiomyopathy Clinic, patients will be treated by a multidisciplinary approach. The team includes heart failure specialists, Viviana Navas, MD, cardiomyopathy clinic medical director, and Dr. Reyna, as well as Dr. Sheffield. "Working with them are other specialists in cardiothoracic surgery, electrophysiology, hematology and oncology, digestive diseases, neurology, nephrology, and transplant of the kidney, liver and heart.

"We have experience in diagnosing cardiomyopathy early and stopping the progression of damage to the heart," Dr. Sheffield says. "But even if patients come to us after the damage is already significant, our team offers an individualized approach to treatment, providing a great range of care by a variety of specialists."

- [Return to Top](#)

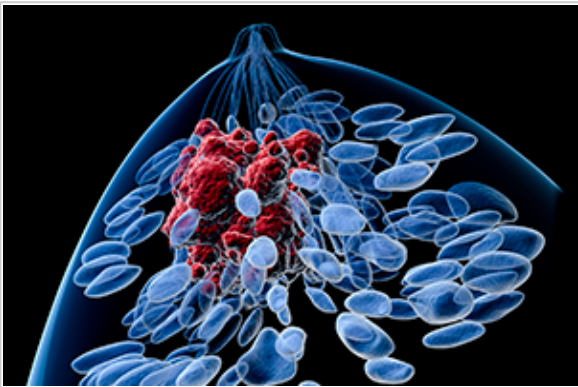
Advances in Mammography: Fighting Cancer in 3D

Regular screening mammograms, which create two-dimensional views of the breast, can reduce cancer death by 30 percent. But newer technology that creates three-dimensional (3D) mammograms offers important advantages, including greater detection of breast cancers that cannot be seen using those traditional mammograms.

In one study of almost 13,000 women, use of 3D mammograms resulted in a 40 percent increase in detection of invasive breast cancer. This new technology is available at both Cleveland Clinic Florida's academic medical center in Weston, as well as the West Palm Beach location.

The 3D mammogram is also called "breast tomosynthesis."

"Tomosynthesis gathers images of the breast from several different angles, to create a series that forms the 3D image," says Maria Artze, MD, a Cleveland Clinic Florida radiologist who specializes in breast imaging. "Having these various images reduces the challenge of seeing areas where tissues overlap, and so improves the radiologist's ability to detect breast cancer."



The technology makes it possible for the first time for radiologists to see a 3D image of the breast. Because of the high level of detail it provides, the images also highlight masses and abnormalities that conventional mammograms might miss. "In images of the breast, dense tissue appears white, and cancer appears white," says Cassann Blake, MD, Cleveland Clinic Florida breast surgeon. "Tomography gives us much more detail compared to other types of mammograms. Especially for women with dense breast tissue, this detail is important."

For the patient during the screening, the procedure will be familiar to other mammograms they've had. The only difference is that part of the equipment moves in an arc around the breast, instead of staying stationary.

Studies also show that with tomosynthesis, fewer patients need to return for additional mammograms, visits that can cause stress and expense, plus exposure to additional radiation. Research further shows this procedure provides a 15 percent decrease in the number of "false positives," where tissue looks cancerous but through biopsy (tissue sample) or another exam is later found to be normal. So 3D mammograms can also help women avoid unnecessary biopsies.

"Early detection of breast cancer is a key area that we want to highlight," Dr. Blake says. "Offering the advantages of the 3D mammogram is part of our goal to provide our patients with the best quality of care. Talk to your doctor about whether a 3D mammogram is best for you."

- [Return to Top](#)

Novel Transplant Brings Life - Changing Relief from Pancreatitis

A new procedure at Cleveland Clinic Florida offers hope and relief to patients with chronic pancreatitis, an extremely painful and debilitating condition that often causes decades-long reliance on pain medication. Removing the entire pancreas, or part of it, is sometimes the only solution to resolve the pain for these patients. But without the pancreas, the body cannot naturally produce insulin. And the diabetes that results is difficult to control.

However, islet cells of the pancreas can work to produce insulin when transplanted into the liver. So in this procedure, now offered at Cleveland Clinic Florida, experts will remove the pancreas, isolate the patient's own islet cells and then transplant them into the liver.

"Because this procedure requires expertise in so many different areas, not many centers in the country can offer it," according to Conrad H. Simpfendorfer, MD, Cleveland Clinic Florida surgeon and hepatobiliary specialist. "These patients have been suffering for years, sometimes even decades. We're excited to offer this option to improve their pain and their quality of lifeóand take steps towards preventing them from developing diabetes."

Earlier this year, pancreatology subspecialists at Cleveland Clinic Florida began evaluating the first patients for the novel procedure. In time, they expect to treat 20 to 30 patients a year this way. "It's not appropriate for everyone with chronic pancreatitis," says Luis F. Lara, MD, a gastroenterologist with specialized training in pancreatic disease and islet cell transplants. "But for those who qualify, it can make a huge difference in their lives."

Though pancreatitis can sometimes be tied to genes, alcohol abuse or smoking, for many patients with chronic forms of the disease, there is no known cause.

The goal with this "auto" (or self) transplant is to decrease the severity of pain, reduce the need for addictive pain-relieving drugs, prevent diabetes and improve quality of life. "Research shows that this procedure can do all that," according to Dr. Lara.

Long-term results related to blood sugar control and better quality of life are encouraging, according to a study done at Cleveland Clinic in Ohio. Up to three-quarters of patients who have the procedure alleviate the use of pain medications. Another study found that, when asked if they would make this choice again, even if they became diabetic afterward, 95 percent of patients said they would. "The pain relief makes a huge difference for them," Dr. Lara says.

As an added benefit, because the transplanted cells are the patient's own, they do not need anti-rejection drugs.

"Members of our team have great experience performing every step of this procedure," Dr. Lara says. "Most people with chronic pancreatitis won't need this treatment, but it's a great opportunity to change the lives of people who are significantly affected by pain, particularly when other treatments have been unsuccessful."

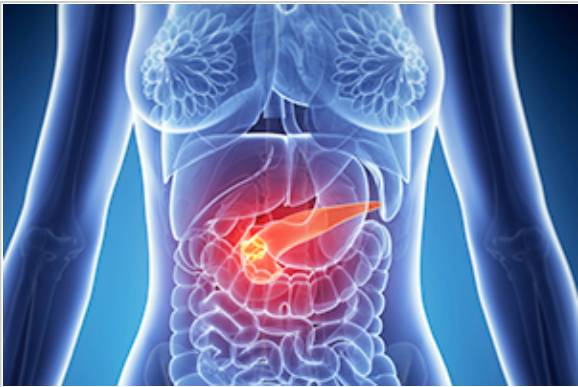
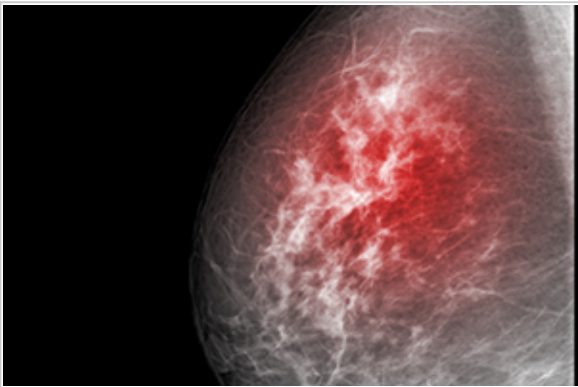
- [Return to Top](#)

Advancements in Spine Surgery for Degenerative Disease

When surgery is the best treatment for age-related damage to the spine, neurosurgeons at Cleveland Clinic Florida offer progressive treatment options that can provide dramatic relief and quicker recovery than ever before.

"Today, advanced imaging equipment gives us greater precision and speed, spinal instruments like screws and rods are of higher quality, and leading-edge materials help patients heal better," according to Scott Robertson, MD, a Cleveland Clinic Florida neurosurgeon. "Together, these offer great advantages, and our patients with degenerative disc disease are experiencing much better results than possible in the past."

Degenerative disc disease occurs because of natural changes in the spine over time. Especially in older adults, these changes can be related to osteoarthritis, herniated



(slipped or ruptured) disks and spinal stenosis (narrowing of the space inside the spine where nerves are).

Experience with state-of-the-art technology is essential to the successful repair of damage and to protect the delicate structures, tissues and nerves in and around the spine, Dr. Robertson says. This includes expertise with innovations such as the O-arm® Surgical Imaging System.

The O-arm provides real-time, three-dimensional CT images of the spine and the surgeon's instruments, right in the operating room. It shows a high level of detail—even of areas not in direct view of the surgeon—and requires less radiation than previous methods. The system's computerized "navigation" allows the neurosurgeon to quickly and precisely reach the specific area that needs repair and avoid the surrounding tissues and nerves.

"Though back surgery is intricate, we're able to do it more quickly with this tool—sometimes in half the time," Dr. Robertson says. "This means less time for the patient under anesthesia, less damage to muscles and other tissues, and a faster recovery. Some of our patients can go home the next day."

In other advancements, newer techniques allow Cleveland Clinic Florida neurosurgeons to offer "mini-fusion" (where bones grow together to stabilize the movement of painful vertebrae) and avoid the use of larger rods and screws of traditional fusion.

"To optimize bone healing, we're also using biologic chemical compounds like bone morphogenic proteins," he says. Produced by genetic engineering, these proteins stimulate the bone to fuse.

"And since Cleveland Clinic is an academic medical center, we train other physicians and teach continuing medical courses to share what we've learned, which also keeps our skill levels high as surgeons," Dr. Robertson says. "We're always looking ahead at coming advancements, so we can offer the latest proven, innovative treatments for our patients."

• **Return to Top**