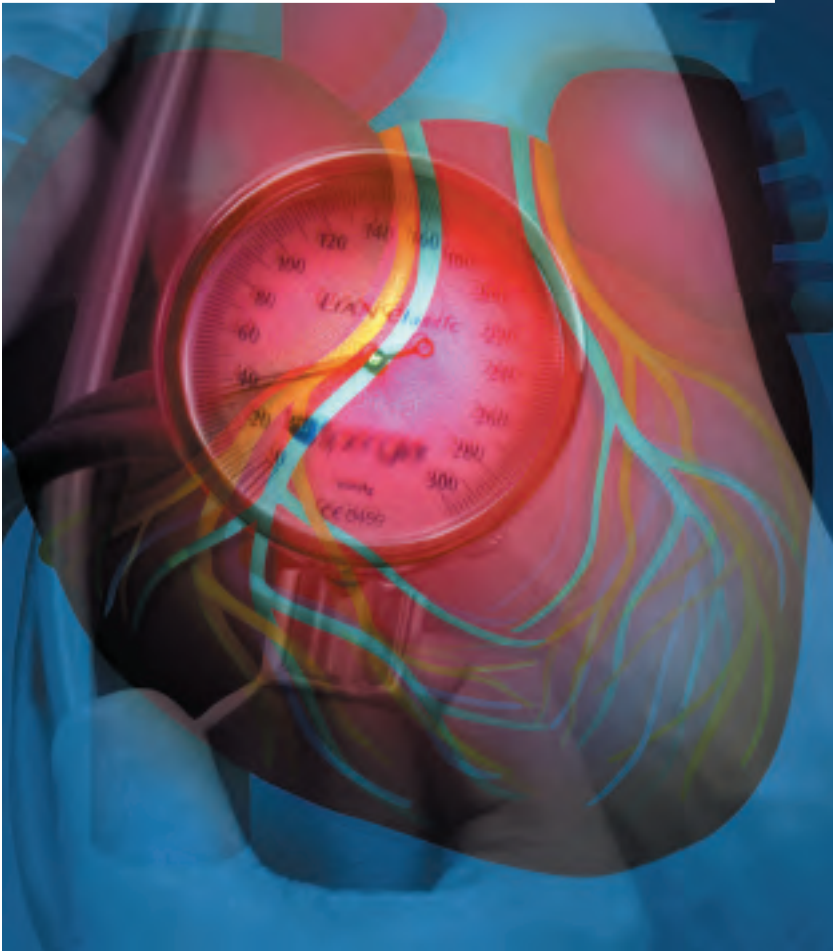




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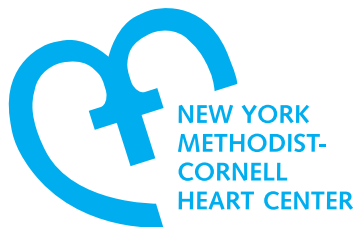
INSTITUTE

for
CARDIOLOGY
and
CARDIAC
SURGERY



nym
NEW YORK METHODIST HOSPITAL

The
INSTITUTE
for
CARDIOLOGY
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SURGERY
at
NEW YORK
METHODIST
HOSPITAL



The Institute for Cardiology and Cardiac Surgery at New York Methodist Hospital, which includes the New York Methodist-Cornell Heart Center, is the Hospital's program for the prevention, diagnosis and treatment of all types of heart disease. The Institute brings together a panel of specialists and a range of services in all areas related to cardiac disease. These services, which range from screening and diagnostic procedures to emergency and ongoing treatment for heart attacks and chronic heart disease, are provided at the Hospital's specialized laboratories and clinical units, on both an inpatient and outpatient basis. New York Methodist houses state-of-the-art diagnostic and surgical facilities and the cardiac surgery team at the New York Methodist-Cornell Heart Center comes from the world-renowned Weill Cornell Medical Center at New York-Presbyterian Hospital.

The Institute's staff of physicians includes specialists in all areas of cardiology, interventional cardiology, electrophysiology and cardiac surgery. Referrals to these specialists or to cardiac programs and services available at New York Methodist Hospital can be made through an individual's primary care physician or can be requested through the Institute's referral service.

Physicians and other health care professionals affiliated with the Institute are also available to speak to community groups on a variety of topics related to heart disease prevention and treatment. Other community outreach activities of the Institute include the distribution of informational materials and screening programs. New York Methodist Hospital is a steering member of the Brooklyn Community Heart Health Council.

PROGRAMS AND SERVICES

- Chest Pain Emergency Center
- Diagnostic Evaluation for Heart Disease
- Medical Treatment for Heart Disease
- Interventional Cardiology
- Electrophysiology
- Cardiothoracic Surgery

CONSULTATIVE SERVICES

The Institute maintains a roster of Hospital-based and private practice cardiologists and cardiac surgeons who are specially trained in the evaluation, prevention and treatment of heart disease. **Non-invasive cardiologists** provide expertise in the detection and medical treatment of heart disease. **Interventional cardiologists** are skilled in procedures that restore blood flow to the heart. **Electrophysiologists** specialize in evaluating and treating patients with complex heart rhythm disorders. **Cardiac surgeons** repair and reconstruct blood vessels and valves leading to and from the heart and other organs within the chest cavity.

These physicians can offer consultative services for patients with symptoms of heart disease including chest pain, angina, high blood pressure, high cholesterol, rapid heartbeat and shortness of breath.



CHEST PAIN EMERGENCY CENTER

Since many heart attack victims can recover with minimal permanent damage if they get appropriate emergency care, New York Methodist Hospital's Emergency Department functions as a Chest Pain Emergency Center. The Department has the highly sophisticated equipment and medications necessary for the diagnosis and immediate treatment of emergency cardiac patients. The physicians and nurses are thoroughly trained in emergency medicine, coronary care and advanced life support. New York Methodist is an "EMS 911 Receiving Hospital," and has also been designated an Emergency Heart Care Station by the American Heart Association.

Patients who go to the Emergency Department with chest pain should be sure to tell the triage nurse about their symptoms as soon as they arrive. Medications that can avert severe damage to the heart during the early stages of a heart attack are now available. However, patients do not have an optimum chance of surviving and returning to a normal life unless they are treated quickly. Responding to chest pain as an early symptom of heart attack can literally mean the difference between life and death.

Sometimes the pain is not severe and it is tempting to put off getting medical attention, especially if one is busy or pre-occupied. People with chest pain may deny that they are in danger because they don't feel ill, because they are embarrassed or because they are frightened. To prevent a potentially lethal incident, it is vital to recognize warning signs of a heart attack and to respond to them immediately.

If you are present when another individual complains of, or perhaps just mentions feeling chest pains, you must persuade that person to seek immediate medical attention by contacting a physician or going to a hospital emergency room. An immediate response — even at the risk of learning that the pains signaled a false alarm — is the key to averting death or serious damage to the heart.



DIAGNOSTIC EVALUATION FOR HEART DISEASE

New York Methodist Hospital offers a full range of noninvasive and minimally invasive diagnostic technology. Since surgical procedures are not used, pain and side effects are minimized. In addition to conventional tests such as **the treadmill stress test, echocardiography, cardiac ultrasound** and **Holter monitoring**, the following innovative diagnostic procedures are available:

TRANSESOPHAGEAL ECHOCARDIOGRAPHY

Available only in major teaching hospitals, this technique involves placing a thin ultrasound probe into the esophagus, thereby allowing the physician to view the heart from a very close distance.

PHARMACOLOGIC STRESS ECHOCARDIOGRAM

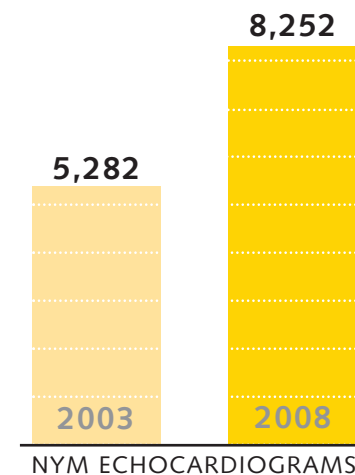
This technique involves the intravenous infusion of medication and use of specialized echocardiographic systems that can detect abnormalities in the motion of the heart wall. This test is especially useful for patients who cannot walk or who are too weak to perform a conventional treadmill stress test.

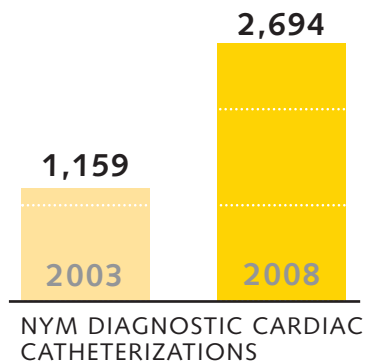
NUCLEAR MEDICINE IMAGING

In this procedure, a tracer dose of radioactive material is injected intravenously. As it travels to the heart, a gamma camera picks up the isotope's emissions to create an onscreen image. The resulting nuclear scan shows which areas of the heart have insufficient blood flow and the extent of any blockages and helps evaluate cardiac function.

CARDIAC MRI

Magnetic resonance imaging (MRI) technology makes it possible to view the beating heart in real time, during a single breath hold, so the heart muscle can be viewed and damage assessed. This advance has revolutionized the diagnosis of heart failure and other serious





cardiac conditions. Cardiac MRI can also be used to diagnose “silent” (symptomless) heart attacks. It is also helpful in evaluating vascular structures like the aorta and the carotid arteries. Additional uses include diagnosis of aortic dissection and identification of cardiac tumors and congenital heart defects. Cardiac MRI is a patient-friendly test; it takes under an hour and involves no radiation.

CARDIAC CATHETERIZATION

This procedure involves the insertion of a thin tube into the femoral artery, near the groin or the radial artery, inside the wrist. The physician then guides the tube (or catheter) upward and into the aorta, the heart’s major artery. A dye is injected through the tube to enable the physician to “see” the entire coronary arterial system on a video monitor. This may reveal the location and extent of any narrowing in the arteries.

A diagnostic cardiac catheterization is an ambulatory procedure; the patient has a short recuperation period afterward but usually does not need to stay in the Hospital overnight.



ELECTROPHYSIOLOGY

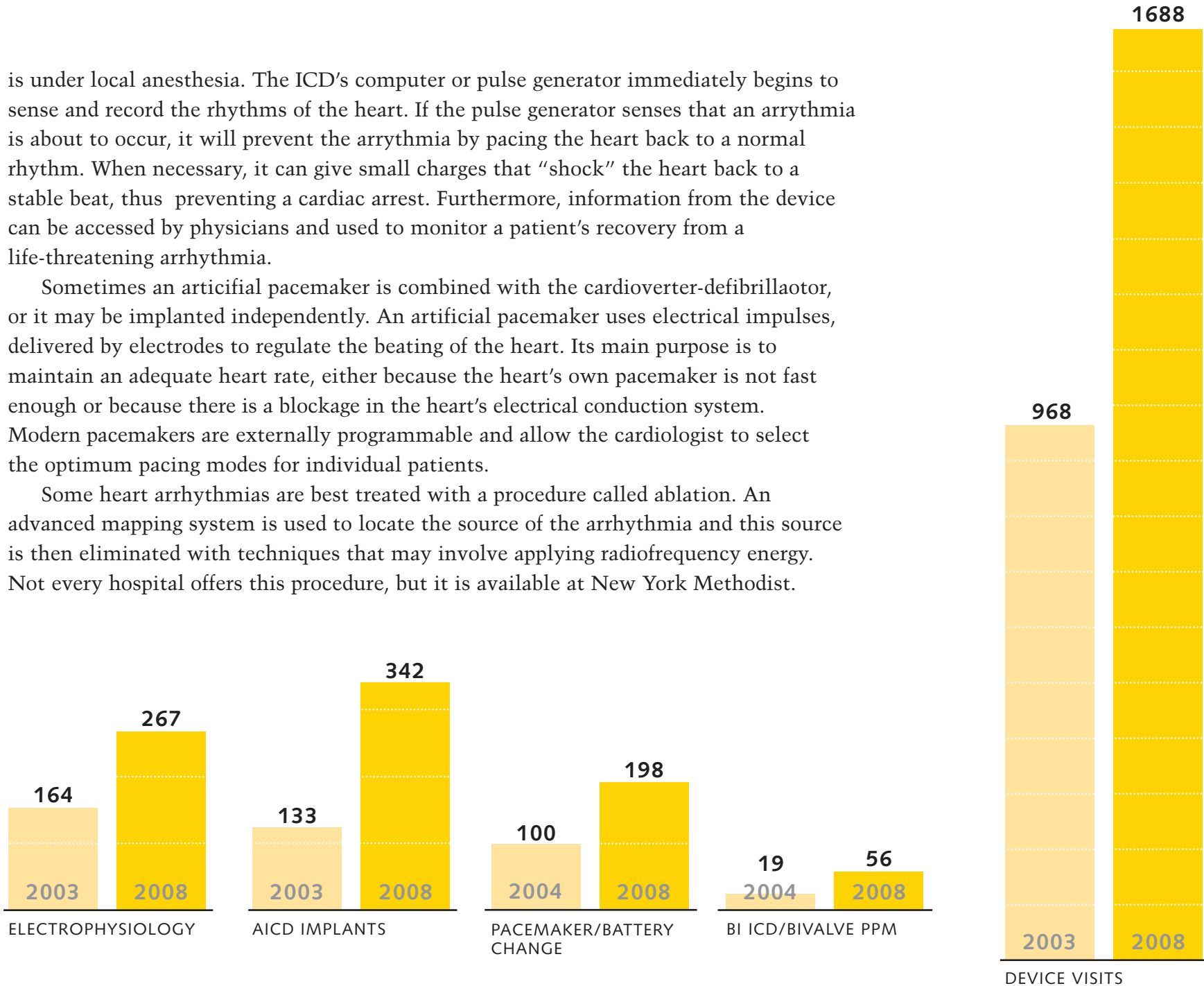
The Electrophysiology Laboratory at New York Methodist is equipped to provide a full range of cardiac care services. Electrophysiology is used to help diagnose and treat arrhythmias (abnormal heart rhythms). Arrhythmias can result in lack of energy, missed days at work or trips to the emergency room. Symptoms of atrial fibrillation may include heart palpitations, dizziness, chest discomfort or shortness of breath. Abnormal heart rhythms can lead to sudden cardiac arrest.

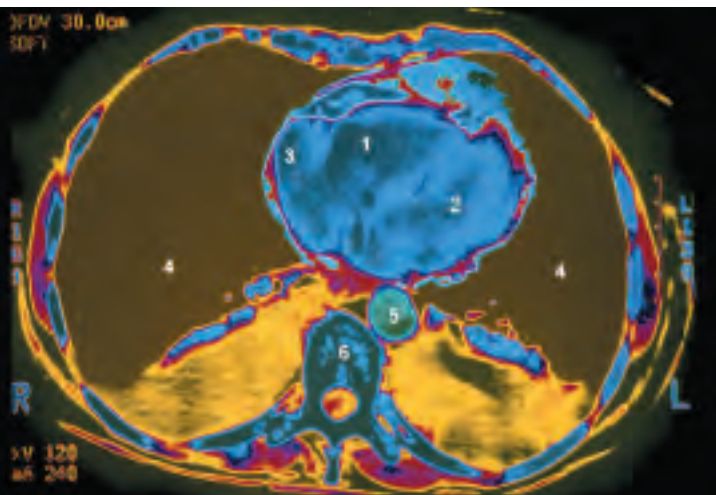
A procedure that involves the implantation of a cardioverter-defibrillator can be performed to treat and prevent cardiac arrest. Approximately the size of a beeper, the implantable cardioverter-defibrillator (ICD) is inserted near the heart while the patient

is under local anesthesia. The ICD's computer or pulse generator immediately begins to sense and record the rhythms of the heart. If the pulse generator senses that an arrhythmia is about to occur, it will prevent the arrhythmia by pacing the heart back to a normal rhythm. When necessary, it can give small charges that "shock" the heart back to a stable beat, thus preventing a cardiac arrest. Furthermore, information from the device can be accessed by physicians and used to monitor a patient's recovery from a life-threatening arrhythmia.

Sometimes an artificial pacemaker is combined with the cardioverter-defibrillator, or it may be implanted independently. An artificial pacemaker uses electrical impulses, delivered by electrodes to regulate the beating of the heart. Its main purpose is to maintain an adequate heart rate, either because the heart's own pacemaker is not fast enough or because there is a blockage in the heart's electrical conduction system. Modern pacemakers are externally programmable and allow the cardiologist to select the optimum pacing modes for individual patients.

Some heart arrhythmias are best treated with a procedure called ablation. An advanced mapping system is used to locate the source of the arrhythmia and this source is then eliminated with techniques that may involve applying radiofrequency energy. Not every hospital offers this procedure, but it is available at New York Methodist.





INTERVENTIONAL CARDIOLOGY

Interventional procedures are performed by interventional cardiologists. Like cardiac catheterization, therapeutic interventional procedures, which are used to restore blood flow, are non-surgical, performed through the blood vessels (percutaneously) and catheter based. Patients normally stay in the Hospital for one night following one of these procedures, which include:

THROMBECTOMY

In this procedure, the physician removes an obstructive clot that is inhibiting the flow of blood through a vessel to the heart.

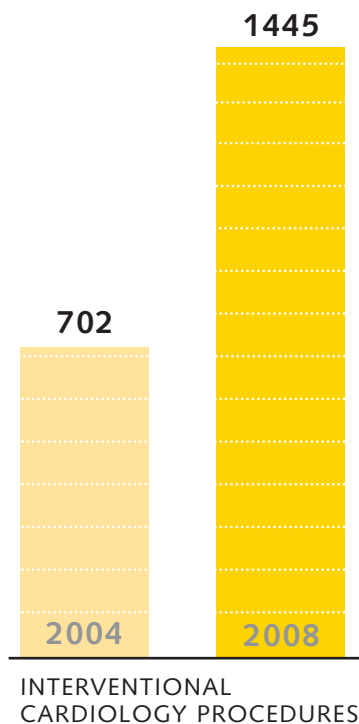
CORONARY ANGIOPLASTY

This technique involves the use of small balloon devices to open a blocked artery and allow increased blood flow to the heart.

CORONARY STENTING

A stent is a small metal scaffold, which can be placed in an obstructed blood vessel to hold it open and allow the blood to flow more freely. In a relatively small number of cases, the artery may become clogged again (restenosis) and it must be treated again with a procedure such as angioplasty or bypass surgery. **Drug eluting stents**, which are appropriate for some patients, release a drug that prevents the build-up of new tissue that can relog the artery, thereby minimizing the need for repeat procedures.

To ensure that patients needing diagnostic cardiac catheterizations or therapeutic interventional procedures can schedule them in a timely manner, New York Methodist Hospital has three cardiac catheterization laboratories and a 20-bed post-procedure unit.



CARDIAC SURGERY

Although medication and interventional cardiology often function to keep arteries to the heart from becoming clogged and impeding blood flow, surgery to bypass damaged arteries is sometimes the best option for preventing an imminent myocardial infarction (heart attack) or for avoiding a recurrence of one. The New York Methodist-Cornell Heart Center is one of only three facilities approved to perform cardiac surgery in Brooklyn and it completes the full continuum of quality heart care offered at the Hospital. The Heart center is on the forefront of new technologies and minimally invasive surgeries that afford patients state-of-the-art care. Procedures performed include:

CORONARY ARTERY BYPASS GRAFT SURGERY (CABG)

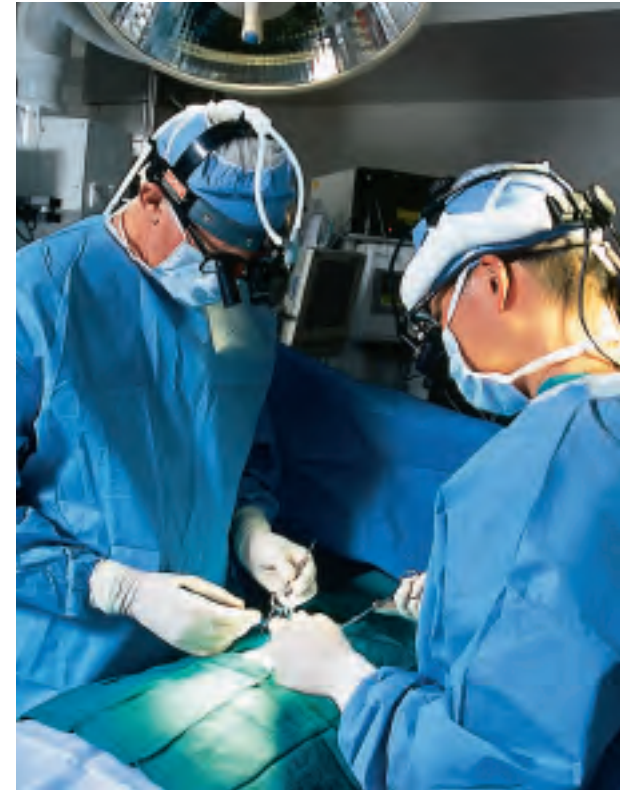
For appropriate candidates, it is now possible to approach cardiac bypass surgery as a minimally invasive procedure, involving very small incisions and/or the elimination of the use of the heart-lung machine during the surgery. The advantages of this approach include a quicker recovery, decreased need for blood transfusions, reduced pain and reduced risk of stroke.

VALVE REPLACEMENT AND REPAIR

• MITRAL VALVE SURGERY

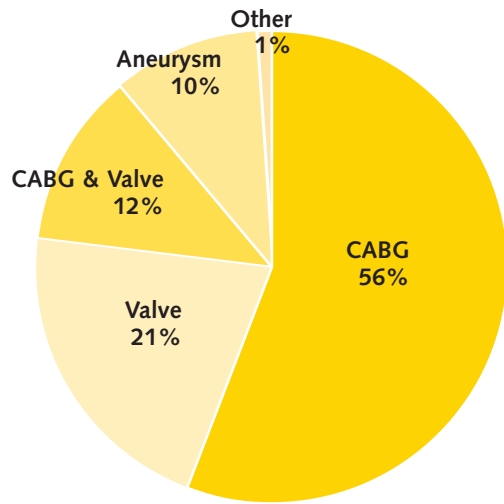
The mitral valve is the “inflow valve” for the main pumping chamber of the heart, the left ventricle. Blood flows from the lungs, where it picks up oxygen, across the open mitral valve into the left ventricle. If all is functioning well, when the heart squeezes, the valve closes and prevents blood from backing up to the lungs. If the valve leaks (causing regurgitation of blood into the lungs) or narrows (stenosis), a mitral valve repair may be needed.

In the past, surgeons treated mitral valve disease by removing the diseased valve and implanting an artificial valve (valve replacement). However, in many cases, it is now possible to repair, rather than replace, the mitral valve. The advantages of this approach include improved long-term survival rates, a decreased need for repeat surgery and

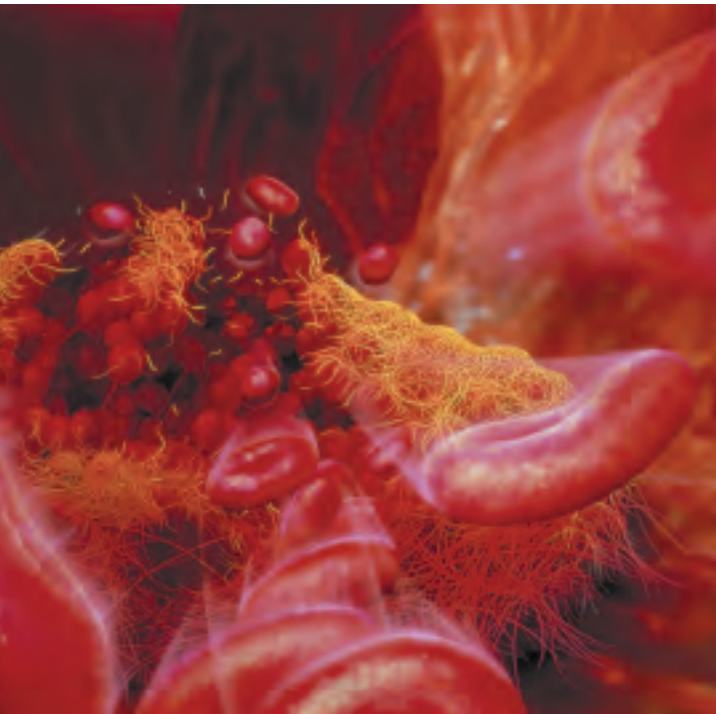


New York State Department of Health statistics demonstrate that the New York Methodist-Cornell Heart Center had among the lowest observed, expected and risk-adjusted in-hospital/30 day mortality rates for isolated CABG surgery in the entire State.*

*2005 statistics



CARDIOTHORACIC SURGERY / 2008



reduced risk of stroke and infection, as well as the ability to avoid long-term treatment with blood thinners.

The New York Methodist-Cornell Heart Center is one of the few in the area with the capability to perform the surgery using a minimally invasive procedure. Unlike traditional open heart surgery, this does not involve stopping the heart, so it results in less trauma and reduced risk of stroke. The mitral valve is repaired or replaced through a small incision and recovery time is greatly reduced.

- **AORTIC VALVE SURGERY**

Blood is directed out of the heart to the rest of the body through the aortic valve. If this valve is blocked (stenosis), the work of the heart is increased, and if the blockage is severe, the aortic valve needs to be replaced or the heart will fail. The aortic valve can also leak (aortic insufficiency). It may also be involved in patients who have aortic aneurysms. The aneurysm may stretch the valve, causing it to leak. Depending on the individual circumstances, the valve may need replacement or it may be possible to repair it. In either case, surgeons at NYM are able to use minimally invasive approaches to provide the appropriate treatment.

- **THORACIC ANEURYSM REPAIR**

The portion of the aorta that runs through the chest is called the thoracic aorta. The expansion or bulging out of a weak area of the thoracic aorta is called a thoracic aortic aneurysm (TAA). (Approximately 25 percent of aortic aneurysms occur in the chest, and the rest involve the abdominal aorta.) Traditionally, such aneurysms required extensive open surgical procedures in which the dilated segment of the aorta was replaced with an artificial blood vessel. Today, many of these aneurysms can be fixed from within the blood vessel, using state-of-the-art imaging equipment and grafts. This procedure is referred to as “stent grafting” or “endovascular grafting,” and can be accomplished through small groin incisions. Because of its less invasive nature, the hospital stay and recovery time are significantly reduced from those necessary for open surgery.

- **BLOODLESS HEART SURGERY**

In recent years, it has become possible for many patients to undergo open-heart surgery without blood transfusion. Heart surgeons pursue two objectives in this regard: minimizing blood loss and preventing serious bleeding problems. With bloodless surgery, advanced technology, including the use of an argon beam coagulator—a surgical tool using argon gas along with electrocautery to promote clotting and limit blood loss during surgery—are used to control bleeding.

The New York Methodist-Cornell Heart Center is staffed by physicians from the prestigious Weill Cornell Medical Center of New York-Presbyterian Hospital. The Hospital is also using the proven model for excellence established at Weill Cornell to set standards for the training and credentialing of nurses and technicians, quality assurance, performance measurement and reporting

LOCATION

Many of the important services of New York Methodist's Institute for Cardiology and Cardiac Surgery are located inside the Hospital buildings at 506 Sixth Street in Park Slope, Brooklyn. New York Methodist is one of the most modern and well-maintained hospitals in the metropolitan area.

The Hospital's Progressive Cardiac Care Unit, located on a single floor, has modern inpatient facilities that include 50 beds capable of providing necessary care, through the use of telemetry monitoring, while allowing patients to enjoy a more normal environment. All patients in the unit can be monitored so that their heart rhythm is constantly observed and recorded. The Unit also includes eight beds designated for patients who have undergone interventional procedures; these patients generally stay in the Hospital for one night. Patients who need more concentrated cardiac care are placed in the 6-bed designated Coronary Intensive Care Unit.

The New York Methodist-Cornell Heart Center is located in a new state-of-the-art cardiac surgery suite that consists of two cardiac surgery operating rooms, an eight-bed cardiothoracic intensive care unit, a holding area for pre-anesthesia assessment and a family waiting area.

The New York State Department of Health has identified the New York Methodist-Cornell Heart Center's program as having one of the lowest open-heart surgical site infection rates in the New York City region.

REFERRAL

For referral to an appropriate specialist affiliated with the Institute for Cardiology and Cardiac Surgery or to schedule an appointment for a diagnostic procedure, please call (toll free) 866/84-HEART.

For community support services (printed materials, community lectures, screenings, support group information) call 718/780-5367.

The Institute for Advanced and Minimally Invasive Surgery
866. DOCS.14U

The Institute for Asthma and Lung Diseases
866.ASK.LUNG (866.275.5864)

The Institute for Cancer Care
866.411.ONCO (866.844.3278)

The Institute for Cardiology and Cardiac Surgery
866.84.HEART (866.844.3278)

The Institute for Diabetes and Other Endocrine Disorders
866.4.GLAND.2 (866.445.2632)

The Institute for Digestive and Liver Disorders
866.DIGEST1 (866.344.3781)

The Institute for Family Care
866.432.CARE (866.432.2273)

The Institute for Orthopedic Medicine and Surgery
866.ORTHO.11 (866.678.4611)

The Institute for Neurosciences
866.DO.NEURO (866.366.3876)

The Institute for Vascular Medicine and Surgery
866.438.VEIN (866.366.8346)

The Institute for Women's Health
877.41.WOMAN (877.419.6626)

OUR LOCATION

Directions: By Bus: #67 runs along Seventh Avenue. **By Subway:** Take the "F" to the Seventh Avenue station. Walk two blocks to the Hospital. You can transfer to the "F" from the "R" at the Fourth Avenue/Ninth Street station. Transfer from the "A" at the Jay Street Boro Hall station. **For Cars:** The parking garage entrance is on Sixth Street opposite the Hospital, between Seventh and Eighth Avenues.



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