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St Luke's Cardiac History Timeline with Photos, 1903-2003

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St. Luke’s Medical Center’s story begins in 1903 with humble roots and a vision for caring for the medical needs of Milwaukee. William F. Malone, MD, added an office wing to his castle-like mansion on the corner of Madison and Hanover (now 3rd Street) and opened Malone Hospital, the first hospital on the city’s south side. Dr. Malone served as the medical director and head of surgery for the next 15 years. By 1920, the facility had expanded to 40 beds and new owners changed the name to Hanover General Hospital. In 1925, a new addition added another 55 beds to Hanover Hospital. Three years later, in 1928, a group of local businessmen, called the Lutheran Hospital Association, purchased Hanover General and renamed it St. Luke’s.

First Description of Atherosclerosis
Dr. James B. Herrick, an American cardiologist, first described heart disease resulting from hardening of the arteries in 1912. This discovery lies at the root of many of the diagnostic tools and treatments used today.
Weathering the World at War

Dr. Robert Gross
First Heart Surgery

Dr. Robert Gross, an American surgeon, made history when he performed the first heart surgery on a seven-year-old girl in August 1938. Dr. Gross successfully operated on a patent ductus arteriosus, the blood vessel connecting the pulmonary artery to the aorta. Dr. Gross' pioneering efforts paved the way for further experimentation and use of surgical procedures to repair damaged or diseased hearts.

St. Luke’s purchased land on 29th and Oklahoma in 1941 to continue expanding and meeting the needs of patients on the city’s south side. Construction was delayed due to material shortages and restrictions on building during WWII. Until construction began in 1950, the site remained an empty field, except for a sign proclaiming it the “Future Home of St. Luke’s Hospital.” The new hospital officially opened in 1952 and St. Luke’s continued to use the Madison Street facility as a maternity unit until it was demolished in 1958.

Cardiac Catheterization

In 1929, the first documented human heart catheterization was performed by Dr. Werner Forssmann in Germany. Dr. Forssmann performed the first catheterization on himself to prove that a catheter could safely be inserted into the human heart.

In 1941, Drs. Andre Cournand and Dickinson Richards first used a cardiac catheter as a diagnostic tool to measure cardiac output. Today, physicians routinely use catheterization to diagnose heart disease.

Merton Knisely took over management of St. Luke’s Hospital in 1943 and served until his retirement in 1976. When Knisely became the first president of St. Luke’s in 1943, the hospital had only 105 beds. Under Knisely’s leadership, he moved St. Luke’s to its current location and raised patient capacity to 503.

“...In each of our lives we meet only a very few individuals who leave their personal mark upon us. Mert Knisely is one of these. It is difficult to aptly portray his many achievements, but it can probably most simply be said that the St. Luke’s we know today is the culmination of his vision, leadership and personal warmth.”

Clifford F. Messinger
Chairman, Board of Directors,
St. Luke’s Hospital Association, Inc.
The human heart works 24-hours-a-day, seven-days-a-week to pump blood throughout the body. Before the 1950s, there was little to be done when a patient developed an irregular heartbeat. The first pacemakers that were developed in the early 1950s were large and bulky and they stimulated the heart by using electrodes placed on the chest. In 1960, the first totally implantable pacemaker was developed, giving patients liberty from the large external pacemaker units. During the mid-to-late 1960s, "demand" pacemakers were introduced, providing stimulation only when necessary. All new pacemakers today are "demand" models.

Aortic Valves
Dr. Charles Hufnagel, an American surgeon, developed a mechanical plastic valve to repair damaged aortic valves in 1951. It demonstrated for the first time the revolutionary possibility of a functionally moving artificial body part. Today, physicians use both mechanical valves and biological valves, such as those from pigs (porcine valve) or human organ donor hearts.

First Successful Open Heart Surgery
In 1952, Dr. F. John Lewis, an American surgeon, performed the first successful open heart surgery in the United States on five-year-old Jacqueline Johnson.

1953 marked IBM’s development of the first heart-lung machine. Surgeons who were performing open heart surgeries were faced with the problem of how to stop the heart from beating, yet keep blood flowing throughout the rest of the body. The heart-lung machine solved that problem.

In December 1955, St. Luke’s purchased the state’s first heart pump, the precursor to the heart-lung machine. The machine was used during the first open heart procedure done in a Milwaukee-area hospital.
Some might say that 1960 was the year cardiac care was born at St. Luke’s. In 1960, Dr. Derward Lepley joined St. Luke’s and developed the state’s first cardiac catheterization program, turning St. Luke’s into one of the Midwest’s top heart care centers. Dr. Lepley’s primary specialty was heart valve surgery, but perhaps was most known for performing the Midwest’s first heart transplant on Betty Anick in 1968.

“A man who did much good in the world. He was a forward thinker in the kind of medicine he practiced.”

Merton Knisely

Heart Care at its Finest Hour

Ventricular Assist Device
In 1965, Drs. Michael DeBakey and Adrian Kantrowitz became the first surgeons to implant a mechanical device to help a diseased heart. The device was a partial artificial heart, a left ventricular assist device, or VAD. VADs are surgically implanted mechanical pumps that help maintain the pumping ability of a heart that can’t effectively work on its own. Today, VADs are typically implanted in patients who are waiting for a heart transplant and whose hearts are too weak to function independently.

It Took Two
During the mid-to-late 1960s, Dr. Dudley Johnson, a resident at Milwaukee’s V.A. Hospital, began to experiment with bypass surgery under the direction of Dr. Lepley. Dr. Johnson later joined the St. Luke’s staff and teamed up with Dr. Lepley to form St. Luke’s “dynamic duo” of heart care. By 1968, Drs. Johnson and Lepley had performed 290 open heart procedures. The pair also formed a corporate partnership in 1968, but parted ways in 1972.

In 1967, a 51-year-old woman from Cleveland was the first person in the United States to undergo bypass surgery on a coronary artery. Dr. Rene Favaloro, a surgeon from Argentina, used a saphenous vein graft (a vein from the leg) in the procedure and undoubtedly changed the history of heart surgery.

Dr. Derward Lepley

Dr. Merton Knisely

Dr. Dudley Johnson

Dr. Rene Favaloro
Louis Washkansky, a 55-year-old South African grocer, had suffered a number of heart attacks that had almost totally incapacitated his heart muscle. In December 1967, during a five-hour operation, Dr. Christiaan Barnard successfully replaced Washkansky’s diseased heart with the heart of a 23-year-old woman who died in a car accident. Dr. Barnard knew the surgery was a success when he first applied electrodes and Washkansky’s new heart began beating. Washkansky lived only 18 days after his transplant, dying of double pneumonia as a result of his suppressed immune system.

**A Family of Heart Firsts**

The Anick family has a history of cardiac firsts and strong ties to St. Luke’s Hospital. In 1961, Dr. Derward Lpley implanted Milwaukee’s first pacemaker in John Anick of West Allis.

Dr. Lpley, inspired by the experiments with heart transplants around the world, began to assemble a team to perform a heart transplant at St. Luke’s when a good candidate arose.

The heart of Betty Anick, John’s wife, was weakened by a viral infection and a transplant was her only hope. On October 21, 1968, Betty became the 64th patient to undergo a heart transplant in the world and only the 7th or 8th in the United States. She went on to become the world’s longest living female heart transplant survivor. Betty died in 1977, eight years and five months after her surgery.

In 1971, John Anick became the first patient at St. Luke’s to be fitted with a device that transmitted an EKG reading via radio waves to a monitor at the nurse’s station.
Elvira Fillner was the second person to receive a heart transplant at St. Luke's. Fillner died 25 days after surgery. As a result, St. Luke's physicians suggested that an active transplant program at the hospital should be delayed because a solid research program hadn't yet been established to support it.

**Expanding Heart Care Horizons**


**Extending the Life of Pacemakers**

The development of pacemakers took another leap forward with the development of the lithium battery in 1975. These batteries extended the life of pacemakers to 10 or more years.

**Angioplasty**

Angioplasty is a standard therapy for people with clogged arteries. During angioplasty, a balloon catheter is inserted into the clogged artery and gently inflated, reopening the clogged passage to restore normal blood flow.

In May 1977, Drs. Andreas Grueztig and Richard Myler performed the first human coronary balloon angioplasty during a bypass surgery in San Francisco. In September 1977, in Zurich, Dr. Grueztig performed an angioplasty on a patient who was fully awake.

Eleven years after the first angioplasty was performed, a new development forever changed the procedure—coronary stents were used for the first time in 1987. A stent is a wire mesh tube used to prop open an artery that’s recently been cleared using angioplasty. By the mid-to-late 1990s, stents became a commonplace part of the angioplasty procedure. By 1997, one million angioplasties had been performed worldwide.
Artificial Hearts of Gold
In 1982, Dr. Willem DeVries implanted the world’s first Jarvik-7 heart in 61-year-old Barney Clark. After the surgery, Clark was bed-bound and attached to a washing machine-sized air compressor that powered his artificial heart. He suffered a number of strokes before he died 112 days after his implantation.

Heart transplant goes well at St. Luke’s
In 1984, St. Luke’s performed heart transplant surgery for the first time since the death of Elvira Fillner in 1970. The transplant on 38-year-old Frank Kritter was a success and once again St. Luke’s was performing heart transplants.

Milwaukee man receives Jarvik-7 artificial heart
In April 1986, St. Luke’s received approval from the Food and Drug Administration to use the Jarvik-7 artificial heart. On November 21, 1986, Drs. Alfred Tector and Terence Schmal successfully implanted the Jarvik-7 heart into Ronald Smith. The artificial heart sustained Smith’s life until a donor heart was found and successfully implanted on November 26, 1986.

St. Luke’s Is Among The First To Use New Heart Attack Drug
In 1987, St. Luke’s Medical Center was the first hospital in the United States to use tissue plasminogen activator, or “tPA.” This drug is a thrombolytic agent that dissolves the blood clots that cause most heart attacks and strokes. Studies have shown that tPA and other clot-dissolving agents can reduce the amount of damage to the heart muscle and save lives when administered within the first few hours of symptoms.
In June 1989, St. Luke’s Medical Center became the first hospital in the state to perform a coronary angioplasty. The heat-producing laser smooths out and “welds” the plaque to the artery wall, resulting in a widened artery and smooth arterial walls.

St. Luke’s Medical Center attracted nationwide media attention in June 1989 when surgeons performed the first artherectomy in the United States on 58-year-old Lawrence Alfson—a procedure in which the layers of plaque that narrow a patient’s arteries are “shaved” away and removed with a tiny vacuum.

In September 1990, St. Luke’s Medical Center performed its 100th heart transplant on Annette O’Connell of Muskego. Doctors and nurses commented that the biggest advance since St. Luke’s first heart transplant on Betty Anick was the development of cyclosporine, an anti-rejection medicine.

In 2001, St. Luke’s became the first hospital in the nation to use microwave ablation for atrial fibrillation. Atrial fibrillation is a short circuit in the natural electrical system that makes the heart beat.

In 1991, St. Luke’s Medical Center became the first hospital in the area to begin using stents during angioplasty procedures.
Adding to heart care “firsts”

St. Luke’s Medical Center was the first in the Midwest to implant Heartmate ventricular assist devices, or VADs, in 1994. VADs are surgically implanted mechanical pumps that help maintain the pumping ability of a heart that can’t effectively work on its own. The Heartmate VAD was the first pneumatically driven pump.

In 2001, St. Luke’s was first in the Midwest to do laparoscopic (“closed chest”) bypass surgery on 64-year-old Lynn VanTassel. Traditionally, open-heart surgery requires opening a patient’s chest by cutting through the breastbone, leaving an 8- to 10-inch scar. In stark contrast, a closed chest procedure, which utilizes the robotic surgical system, allows a surgeon to perform the bypass through three tiny pencil-sized holes.

In 2001, St. Luke’s Medical Center was the first hospital in Milwaukee to use intravascular brachytherapy, or IVB. During IVB, a small amount of radiation is delivered to the narrowed artery, opening it up and restoring blood flow.

The Future of Heart Care

In 2004, St. Luke’s Medical Center will open the new Heart Care Center and Patient Tower. This newest addition to St. Luke’s Medical Center is designed to accommodate continually advancing medical technology and will be home to some of the most innovative cardiac care programs and treatment options in the Midwest. St. Luke’s Medical Center is finding better ways to care for heart patients. This new center will allow St. Luke’s to continue bringing world-class heart care to every person who needs it. All education, prevention, diagnostic and treatment services—both for inpatient and outpatient care—will be available under one roof.