Eisenhower's Billion-Dollar Heart Attack — 50 Years Later

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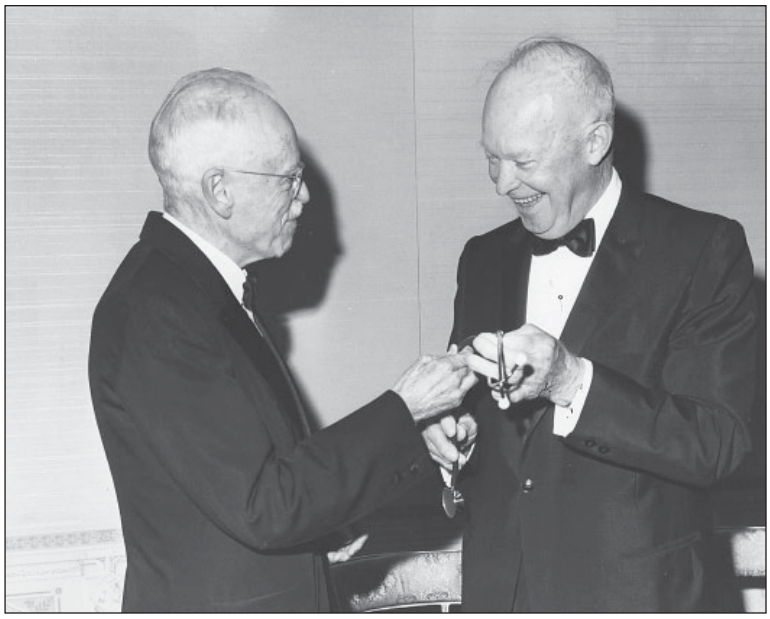
Fifty years ago this week, on Saturday, September 24, 1955, President Dwight D. Eisenhower was playing golf at the Cherry Hills Country Club outside Denver. On the ninth hole, he started to complain about an upset stomach. He suspected that it was indigestion, since he had eaten a hamburger with slices of Bermuda onion for lunch. Nonetheless, he decided to call it a day, and he returned home. Shortly after midnight, he woke up with severe chest pain. He asked his wife, Mamie, for milk of magnesia, but she was concerned enough to call his personal physician, Dr. Howard Snyder, who arrived at the president's bedside around 2 a.m.

According to his diary, Snyder gave Eisenhower amyl nitrate to sniff and sequentially injected papaverine and morphine. The president fell into a deep sleep, not to awaken until 11 a.m. His chest pain persisted, however, and an electrocardiograph was brought over from Fitzsimons Army Hospital. It recorded an anterolateral acute myocardial infarction, and the president was hospitalized. More than 24 hours had elapsed since the onset of his first symptoms of myocardial ischemia.

Since only Army doctors were involved, Vice President Richard Nixon thought it advisable to call in a civilian heart specialist "because we cannot overlook the fact that many people in the country might have more confidence, however unfounded, in a civilian specialist of national reputation."[1] There was consensus to consult Dr. Paul Dudley White of Massachusetts General Hospital in Boston, arguably one of America's foremost cardiologists, who arrived in Denver by military aircraft on Sunday morning. During the physical examination, he noted a pulse rate of 90 per minute and blood pressure of 115/65 mm Hg. Auscultation of the heart revealed a friction rub. Serial electrocardiograms showed ventricular and supraventricular ectopic beats. The president, convalescing under an oxygen tent, was given intravenous heparin.

News of Eisenhower's myocardial infarction had a strong effect on the country — most immediately and precipitously, on the financial markets. On Monday morning, September 26, Wall Street panicked, and shares went into a tailspin. By the end of the day, the Dow Jones had dropped by 6 percent — a paper loss of $14 billion, the largest decline since the crash of 1929 and one that would exceed those following the assassination of President John F. Kennedy and the shooting of President Ronald Reagan.

In response to such panic, reassuring statements came not only from the White House, but also from some of the nation's leading cardiologists. Dr. James Watts, head of the National Heart Institute, remarked, "There are a half a dozen congressmen who have suffered coronaries in the last few years living normal lives just as if they never had them."[2] Watts specifically cited the case



Dr. Paul Dudley White and Former President Dwight D. Eisenhower, 1963.

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Changes in the Management of Acute Coronary Syndromes since 1955.

Year	Bed Rest	Coronary Care Unit	Thrombolytic Agents and Angioplasty	Anticoagulant Agents	Postinfarction Treatment	Postinfarction Risk of Reinfarction*
1955	6 wk	No	No	Yes	None	1.00
1980	2 wk	Yes	No	Yes	Aspirin, beta-blockers	0.69
2005	Days	Yes	Yes	Yes	Aspirin, beta-blockers, angiotensin-converting–enzyme inhibitors, statins, clopidogrel	0.48

* Data are from an analysis of the Framingham Study, in which the period 1950 through 1969 was used as the reference period.

of Senator Lyndon B. Johnson of Texas, who had recently had a myocardial infarction and was on his way to full recovery.

On September 27, White said in a press conference, "I am returning to Boston today partially because the president's condition is satisfactory and partially because he has had such excellent attention here, medically and otherwise."[3] White attempted to dispel concern that the golf Eisenhower was playing before his attack or the high altitude might have contributed to his infarction. He said, "We see attacks come frequently at sea level and in people who never played any golf. My own feeling is that golf has been wrongly blamed and that people who play golf and had an attack at the age of 55 might have had an attack at 45 if they hadn't played golf."

On October 30, White discussed the event at the meeting of the American Heart Association in New Orleans, enumerating the most important risk factors for myocardial infarction: older age; male sex; broad, muscular body build; active, ambitious personality; and heredity. Among the environmental contributors, he mentioned stress and strain, diet, and exercise. Factors that needed appraisal ("although at the moment they appear to be much less important") included the use of alcohol, certain "local religious and social customs," and tobacco use.

Eisenhower had started smoking when he was a cadet at West Point and was up to four packs a day by the age of 59 years, when his doctor advised him to cut down to no more than one pack a day.[4] After an attempt to limit his smoking, he found counting cigarettes too cumbersome and quit altogether.

With regard to his cardiovascular system, Eisenhower's short-term recovery was uneventful. Just five months after his infarction, on February 17, 1956, he played his first round of golf at the Glen Arven Country Club in Thomasville, Georgia. Like many patients who have had a cardiac event, however, he endured a period of anxiety and depression.[3] In June 1956, he had a small-bowel obstruction as a complication of Crohn's disease, and an ileotransverse colostomy was performed.[4]

Eisenhower was somewhat reluctant to trust the assurances of his physicians that he was fit to run for reelection. He expressed his hope that they "knew what they were talking about, since the job of being president could not be performed by anyone who was not in good condition."[5] Still, as we know, on November 6, 1956, Eisenhower won the election by a landslide.

On November 25, 1957, the president suddenly noticed that he could not complete his sentences when speaking to his secretary.[4] Occlusion of the left-middle cerebral artery was diagnosed. Doubts began to arise about his ability to survive a second term, and he gave Nixon a letter granting him immediate authority to assume the powers of the presidency in case he became incapacitated. Eisenhower capably completed his second term, however, and retired to his farm in Gettysburg, Pennsylvania, in January 1961. In August 1965, he had another serious myocardial infarction that ended his participation in public affairs.

From his first infarction in 1955 until his death in 1969, Eisenhower had at least 7 myocardial infarctions and 14 cardiac arrests.[4] As was customary, prolonged bed rest was prescribed after each infarction. But Eisenhower also benefited from several newly developed cardiac devices and medications. He became one of the first patients to profit from the introduction of the direct-current defibrillator by Dr. Ber-

nard Lown in 1962. He was cardioverted at least four times during one hospitalization. In May 1967, while hospitalized after an infarction, he became one of the first patients to receive bretylium tosylate, a then-experimental antifibrillation drug, which was credited with saving his life. In the late 1960s, the inventors of the intraaortic balloon pump approached the military because they thought that such an invasive therapy would not be acceptable to private insurance companies. Eisenhower, at that time, had end-stage ischemic cardiomyopathy and was briefly considered as a candidate for the device. In the end, though, the scientists declined the opportunity — they worried that if the device failed him, the widespread adverse publicity would permanently ruin its prospects.[4]

Eisenhower's health gradually deteriorated in 1968, and he spent his last nine months in Walter Reed Army Hospital. He died from heart failure on March 28, 1969, at the age of 78 years, nearly 14 years after his first heart attack.

Since the time of that attack, the management of acute coronary syndromes has changed dramatically (see table). The introductions of the formal coronary care unit (1960), defibrillation (1962), thrombolysis (1985), glycoprotein IIb/IIIa inhibitors (1995), and primary angioplasty (1995) have reduced morbidity and mortality in the acute phase. And the availability of antiplatelet agents, beta-blockers, statins, and blockers of the renin–angiotensin system have vastly improved the long-term outlook for presidents and citizens alike.

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