

## A Rough Diamond: F. Mason Sones and the Discovery of Selective Coronary Arteriography

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Join Zoom Meeting - <https://uiowa.zoom.us/j/93469758146?pwd=V3JyR0gwcTV0b2ZkQ2JRRStIMVbVQT09>

### PIONEERS WHO TRANSFORMED CORONARY DISEASE

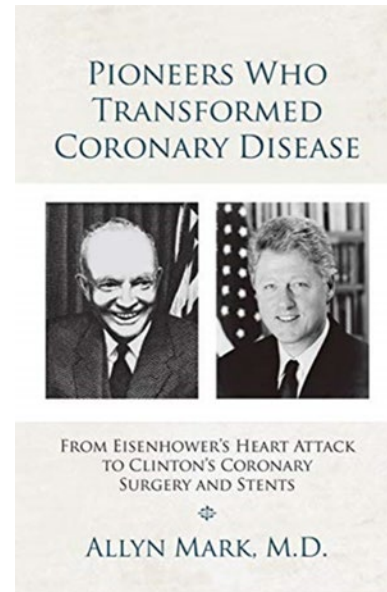
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#### Background:

In September 1955 when the Cold War was foremost on the country's mind, President Dwight Eisenhower suffered an acute myocardial infarction or heart attack while vacationing in Denver with Mrs. Eisenhower. In the middle of the night, he complained of pain across his lower chest. Since he'd complained of indigestion the previous evening, Mamie gave him milk of magnesia but soon realized he was seriously ill, and she called Dr. Howard Snyder, Ike's presidential physician and close friend. He came promptly to the house and administered morphine for the pain but delayed for nine hours before requesting an electrocardiogram that revealed a massive myocardial infarction and before transferring the President to Fitzsimmons Army Hospital by car, not even by ambulance.

At Fitzsimmons, Ike was cared for by two capable military cardiologists in consultation with Dr. Paul Dudley White of Boston, the world's leading cardiologist. Ike's care consisted of five weeks of strict bedrest to be followed by slowly increasing activity before he was allowed to resume full activity at the White House on January 18, 1956. Fortunately, Ike recovered and ran for reelection which he won in a landslide. He did well until November 1965, when he sustained a second heart attack followed by heart failure in 1967, a third heart attack in 1968 and death on March 28 from heart failure and life threatening heart rhythm disturbances.

Although the commentary on Ike's first heart attack has focused on Dr. Snyder's delay in diagnosis and hospitalization, we now know that strict, prolonged bed rest is ineffective in treating heart

attacks. There was nothing his physicians had to offer Eisenhower in the way of effective treatment that would have minimized damage to his heart. Indeed, in mid-20<sup>th</sup> century three words were frequently used to describe coronary artery thrombosis and heart attacks: unpredictable, unpreventable and untreatable.

Over the next half century, innovative, iconoclastic, charismatic, and in two instances tragic, physicians led the way to the discovery and development of coronary arteriography, coronary artery bypass surgery, balloon coronary angioplasty, and coronary stents that transformed the diagnosis and treatment of coronary disease.

In a new book titled "*Pioneers Who Transformed Coronary Disease: From Eisenhower's Heart Attack to Clinton's Coronary Surgery and Stents*." I tell the personal stories of the physicians who made these discoveries and transformed the diagnosis and treatment coronary heart disease.

In my lecture, I will tell the story of F. Mason Sones—an iconoclastic and rough character who in 1958 serendipitously discovered and developed selective coronary arteriography to visualize the coronary arteries—a discovery that lay the foundation for the discoveries that followed and is considered by many the most important discovery in 20<sup>th</sup> century cardiology.

Fifty years after Eisenhower's first heart attack, former President Bill Clinton is among the millions who have benefited from these advances: coronary arteriography, with coronary surgery, coronary angioplasty and coronary stents.