

A serendipitous encounter — F. Mason Sones Jr. (1918–1985)

It takes a genius to see the value of an unexpected event presented to him by fortune, to appreciate its value immediately and to be able to put it into instant use. It was the genius of Mason Sones who realized immediately the invaluable significance of the event which occurred on October 30, 1958, when a catheter meant to be in the aortic root of a patient, inadvertently slipped into the ostium of his right coronary artery and there the contrast material was injected. That was the moment which turned Mason Sones into one of the giants in the history of cardiology.



Mason Sones was born in 1918 and graduated in 1943 from the University of Maryland. In 1950 he was appointed to the Cleveland Clinic as a pediatric cardiologist and became engaged mainly with congenital and rheumatic heart diseases in young patients. In the course of a diagnostic catheterization of a patient with mitral regurgitation, the above described serendipitous event occurred. This led Mason Sones to realize that a contrast agent can directly be injected into a coronary artery and can achieve a most clear and exact visualization, without ill effects on the patient. Sones decided to continue with selective coronary artery injections, a brave decision he made against the advice of several colleagues, like Andre Cournand, who experienced fatalities in experimental animals when contrast media was selectively injected into a coronary artery [1]. This courageous decision changed not only the life and work of Sones but had a revolutionary effect on the future of cardiology [2].

Soon, selective coronary arteriographies, with the intent of visualizing narrowings in the coronary tree, were routinely performed by Sones and his co-workers at the Cleveland Clinic. Sones designed a special preformed tapered tip catheter, an automatic hand-held injector and he also had major impact on the design of the C-arm x-ray device.

The Cleveland Clinic became a Mecca for cardiologists from all over the world. But let us not think that there were no opponents to performing this procedure. Let me describe here a personal experience: In 1965 a leading cardiologist on the West Coast discouraged me to go to the Cleveland Clinic to learn Sones's technique, by saying "this is a lunatic in Cleveland, avoid going there".

Thus, only in 1969 was I fortunate enough to get first-hand experience in coronary arteriographies in Dr. Sones' laboratory for two weeks, a sojourn which seemed to be long enough, as I was already experienced in all other types of catheterizations. Sones insisted that for the first few days I join him for his personally performed catheterizations and only for the rest of my time, would I attend catheterizations by other senior members of his team. He enthusiastically explained to me why he prefers the cut-down approach to the brachial artery, the advantages of the pre-shaped coronary catheter and why he still is using pressure injectors although all his co-workers at that time already switched to hand injections (I must admit, returning to Israel I started to inject by hand). Dr. Sones was a fabulous host, an ardent teacher and a warm person. He insisted that I myself should perform a few procedures in the Clinic, taking personal responsibility for the legal aspects of this. In the afternoons I could spend time in the basement where all the records of selective coronary catheterizations were kept in chronological order, starting with Case 1, the one described above.

As a clear consequence of Sones' work, the Cleveland Clinic became the venue also for the development of coronary bypass surgery and the two methods together changed the face of cardiology forever.

In spite of the worldwide fame, appreciation and honors, Mason Sones remained a modest person,

who shied away from public accolades. Still, I remember him at one of the major American cardiology meetings in the early 1980's when he was called to the podium with other pioneers (he was delivering his words after Andre Cournand, who was already in his 90s) and showed the audience a coronary arteriogram with a vasospastic condition, mischievously admitting only at the end of the presentation that these were his own coronary arteries.

It was characteristic of Mason Sones that the first publication on his breakthrough method came only in July 1962, more than 2 years after its initiation, when he felt confident enough to report, with Dr. Shirey, their experience with 1020 patients [3]. Mason Sones had “the zeal of biblical prophets in his battle for truth”, as his good friend and coworker William Proudfit wrote in a touching farewell script in the Cleveland Clinic Quarterly [4] and likened his character to “an emerald-cut stone”. Mason's daughter Mrs. Patricia Wheat, wrote about her late Father as “a man, small in stature, who was

larger than life in person... who demanded (and gave) great loyalty to those around him” [5].

F. Mason Sones, Jr. died at his home of lung cancer on August 29, 1985. The many honors he received in his life are all insufficient to express how much we cardiologists, the science of Medicine, and cardiac patients all over the world owe him.

References

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