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PRIVATE PRACTICE OF CARDIAC SURGERY AT THE METHODIST HOSPITAL

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In the mid-1960s, the practice of cardiac surgery outside of a medical school environment was a foreign concept. Graduates of approved university programs had to look to other academic programs in order to practice their newly acquired skills. In 1965, four surgeons, recently trained within the Baylor College of Medicine's residency program, entered into an association that would venture into this new frontier.

Surgical Associates was the third professional medical association formed in the city of Houston; the first was a radiological group practicing at St. Joseph's Hospital, and the second was the obstetrical/gynecological physicians practicing in the Texas Medical Center. The purpose of Surgical Associates was to provide quality care to patients needing cardiac, thoracic, and vascular surgery within an environment of private practice. The founding partners of this association were Drs. Robert C. Overton Jr., John B. Fitzgerald, Don C. Quast, and Walter S. Henly. All were trained in their specialty under the supervision of Dr. Michael E. DeBakey, professor of surgery and chairman of the Department of Surgery at Baylor.

Since Baylor owned the heart-lung machines within The Methodist Hospital and paid the perfusionists, the decision was made not to avail these services to this new group in private practice. A request for support was made to the administration of the hospital and found favor with President Ted Bowen and members of Methodist's board of directors.

To his credit, Dr. DeBakey did not try in any way to prevent this direct competition with the Baylor surgery department. While he stopped short of possibly endorsing our endeavor, he made no overt effort to hinder our progress. Perhaps he was secretly proud that a group of his trainees was taking this step, which obviously had to come some day. Thus, necessary equipment was ordered in preparation for the first patient. The day after the heart-lung machine was uncrated and tested, an atrial septal defect was successfully repaired with Dr. Fitzgerald acting as perfusionist.

Dr. Fitzgerald has described this initial event in this manner: "The pump was delivered to the loading dock at The Methodist Hospital the afternoon before our first case was scheduled. We worked well into the night uncrating and assembling the equipment. I had learned to operate a pump-oxygenator while serving in the Air Force when assigned to the Experimental Surgery Department of the School of Aerospace Medicine. To this day, I have no clue as to why the School of Aerospace Medicine owned a heart-lung machine, but they did, and I had plenty of time to tinker with it and learn how to set it up and operate it. Therefore, by default, I became the perfusionist for our team. The following morning, the case got underway without difficulty. The heart was cannulated in preparation for bypass. However, when it came time to initiate cardiopulmonary bypass, we were unable to lower the oxygenator enough to obtain good venous drainage. We were left with only one alternative: to raise the patient. By elevating the operating table to its maximum height and placing the entire surgical team on the highest platforms available, we were able to institute adequate flow for bypass. The operation proceeded smoothly, and the patient recovered without incident."[1]

Ms. Shirley Bryson, a former Baylor perfusionist, came out of retirement to assist with subsequent cases and to train additional pump technicians. One trainee, who served well for many years, was Mr. E. J. Donnelly. He trained numerous perfusionists to work in other institutions throughout the state.

In the early days, patients needing valve replacement, those with aortic aneurysms and dissection, and those with coronary artery disease were accepted for treatment. Aortic and mitral valves were replaced with Starr-Edwards ball valve prostheses until the bileaflet St. Jude Medical valves were proven superior. Various

types of aortic dissections and thoracic aneurysms were managed, some with the aid of the heart-lung machine and others with left atrial-femoral bypass techniques. The earliest attempts to improve the myocardial circulation in patients with coronary artery disease were by utilizing the Vineberg procedure.[2] This operation involved implanting a bleeding internal mammary artery into a left ventricular myocardial tunnel, trusting that vascular connections between the graft and the myocardium would develop. In 1964, Drs. DeBakey and H.E. Garrett performed the first successful vein bypass to a coronary artery.[3] The value of this was not appreciated until Drs. Rene Favalaro[4] and Dudley Johnson[5] independently published their series of bypass procedures in 1967–1969. Surgical Associates performed their first coronary artery bypass successfully in 1969.

Having a private cardiac service and a university cardiac service in the same institution provided competitive advantageousness — for example, the use of the internal mammary artery as a bypass conduit for CABG. Some cardiologists and cardiac surgeons were outspoken against this. At a meeting of the Houston Society of Cardiologists, this subject came under discussion. One Baylor surgeon stated that taking the mammary took excessive time and increased morbidity. It was Dr. Denton Cooley who spoke of the value of an arterial graft. This seemed to change the minds of some cardiologists, for patient referrals became easier for the private practice service after that. When Dr. Garrett left Houston for Memphis, he stated to one colleague at Surgical Associates that we should "continue to use mammaries and we will be doing a superior operation." Not long after, mammary use became the keystone of coronary bypass surgery.

Surgical Associates chose to stay as close as possible to new developments in the field of cardiac surgery. Newer techniques such as cardioplegia, antegrade coronary artery perfusion, retrograde coronary sinus perfusion, and numerous other advances were used in practice as soon as proven safe. It was necessary to maintain an active service within a quality hospital such as Methodist in order to permit scrutiny of our work by peers since private services were being developed in other Houston hospitals. As the practice grew, additional surgeons were added, including Drs. Richard K. Ricks, Charles H. McCollum, Antoinette C. Ripepi, Richard C. Geis, and Michael J. Reardon.

As Houston was growing, Surgical Associates opened active cardiac services at Hermann Hospital, St. Joseph Hospital and Memorial Hospital. These major hospitals began to update their intensive care units and cardiac catheterization laboratories. The city-wide practice increased to the point that two surgeons were always available for surgical operations and night and weekend call. Two factors were important to our success: 1) our primary service remained at The Methodist Hospital, where all of our academic peers ensured that our work was subject to professional scrutiny, and 2) we had two trained surgeons physically present at the operating table for every procedure, and one of us would remain in the hospital with the patient until everything was stable. This often entailed sitting with the patient through the first 24 to 48 hours after surgery. Looking back over the past 45 years,[6] our practice flourished and, of necessity, our association began to divide. Some left to lead in other institutions, some returned to academia, and some remained working at Methodist.

Under the management of Dr. DeBakey's successors, the private cardiac surgery service was merged with the university service in Methodist's Fondren-Brown operating areas. This move seemed motivated by cost-control factors, although some of the competitive advantages of having an independent private service were lost in the process. Of great satisfaction is the realization that Surgical Associates opened doors for many cardiac surgeons to practice their skills. This proved to be of particular importance as techniques for successful coronary bypass operations were perfected, since this of itself produced an explosion in the number of patients needing cardiac surgery, a need that could not be met by academia alone.

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