

Profiles in Cardiology

Andreas Roland Gruentzig, M.D.: The Teaching Genius*

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Andreas Gruentzig's name will forever be linked to the procedure he invented, percutaneous transluminal coronary angioplasty (PTCA) (Fig. 1). I, and many others, will write about his creativeness, courage, integrity, and scientific achievements. His deep feelings for his patients have been emphasized in the forthcoming article entitled "Andreas Roland Gruentzig: The Caring Genius" (Hurst, in press). The purpose of this communication is to highlight his great teaching ability. The popularity of coronary angioplasty occurred because its inventor, Andreas Gruentzig, cared deeply for his patients and was obsessed with teaching the technique to those who wished to learn it.

Andreas Gruentzig joined the Department of Medicine of Emory University School of Medicine in 1980. I gave him one half of my office suite at Emory University Hospital so, because of his proximity, I observed him in his daily activities. I wish to report on some of my observations.

Physicians from the world at large flocked to talk with him. They often met in his office and walked with him to the cardiac catheterization laboratories which are located nearby. While in the catheterization laboratory, some

of them would stand by his side near the patient and others would observe from the booth. They observed his remarkable skill, his kindness to patients, and witnessed, first-hand, his teaching ability.

He met with us at "morning report" at Emory University Hospital where about 20 people gathered. The group consisted of cardiology faculty, cardiology trainees, medical residents and senior medical students. He breezed into the room with a smile. He listened. He usually waited to hear the opinions of others, but then would rise and walk to the "white board" where he would take a black magic marker and diagram the coronary arteries in such a way that his point was obvious. I suppose every cardiologist can diagram the coronary arteries, but no one can do it as he could. His diagrams were works of art. The lines, which were drawn with lightning speed, seemed extensions of his fingers. He was like Picasso drawing a single line as no one else could draw it. But more than that—the lines he drew, plus the words he said, led the viewer to understand.

Each year he organized two large postgraduate courses in an effort to teach angioplasty to anyone who wished to learn it. The courses began when he was in Zurich and were continued twice a year at Emory University in Atlanta. In all, he gave 14 courses, four in Zurich and ten at Emory. The courses grew increasingly popular until 300-500 people came to see him work. Almost all who attended were already skilled at performing coronary arteriography. But they saw him perform, innovator that he was. They witnessed his skill at dilating the coronary arteries. This was possible because he developed the television system that made it possible to transmit his performance in the catheterization laboratory in Emory University Hospital to the Woodruff Administration Building, where the audience was sitting. They viewed a huge television screen. During the course, he would often perform coronary angioplasties on 20-25 patients and, when a coronary obstruction was difficult to pass and relieve, the audience, which was a block away, groaned, but when

*Andreas Roland Gruentzig and his wife, Margaret Ann Thornton Gruentzig, died in a plane crash in Monroe County, Georgia, on October 27, 1985.

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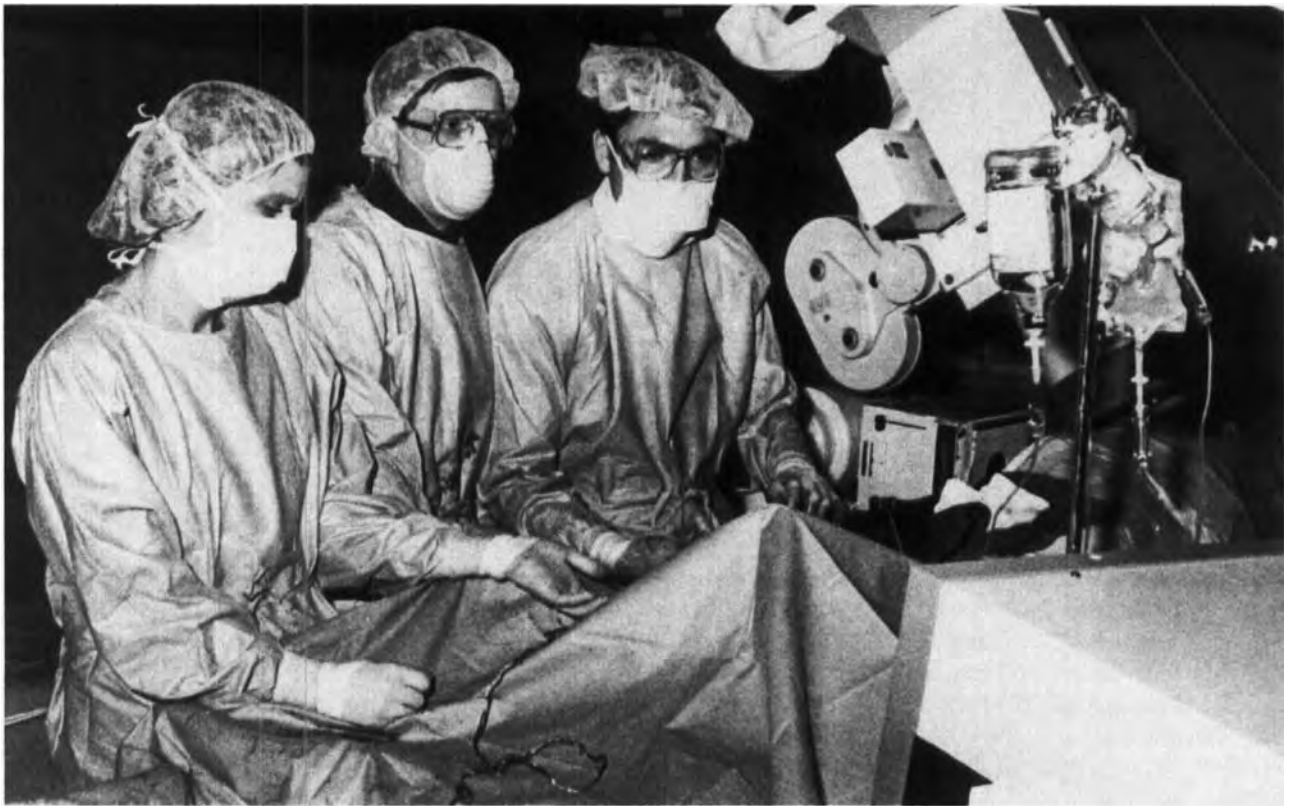


FIG. 1 Teaching, always teaching. Andreas Gruentzig, M.D. (right), Jay Hollman, M.D. (center), and Sally Deneen, R.T. (left).

the obstruction was eliminated the audience cheered. He, of course, was constantly talking to the patient and the remote audience. He, as usual, was in complete control of the moment. He, Dr. Spencer King, Dr. John Douglas, and invited speakers, such as Dr. Richard Myler and Dr. Simon Stertzer, often participated in the courses and took their turns at the live teaching of the procedure. When the course was over, Andreas would have a photograph made of the entire audience. This photograph was always made on the steps of the Woodruff Administration Building. Andreas directed the action like a motion picture director, often peering into the photographer's camera to be certain the scene was to his liking. There were no stragglers for this photograph; everyone wanted to be in it (Fig. 2).

His most important teaching was directly related to patients. He taught cardiology trainees as he performed coronary angioplasty (Fig. 1). The trainees who worked with him completed two to three years of cardiology fellowship and then worked a full year or more with him. The patient was always placed at ease with his comforting words and, in this setting, Gruentzig taught continuously.

He always insisted that the cardiology fellows assigned to him become involved in research. He believed that there were many unanswered questions that needed answers.

He wanted the fellows he trained to be more than skilled technicians. So they prepared for and presented new data at the annual meetings of the American Heart Association and American College of Cardiology.

He lectured all over the world. He could not accept all of the invitations issued to him, even though he was mentally and physically able to arrive home from a trip during the early morning and go to the hospital for work by 7:30 A.M. At the podium he was in charge. Even the largest room became quiet as the fascination of the audience grew. Each person in the room became intrigued by the "story" that the speaker unfolded. They were spellbound by his honesty and demeanor. He came through as creative but humble. He would emphasize the complications, which were few in number, as much as he emphasized the success of the procedure. He stated how much additional work had to be done. The paradox was that he was simultaneously coming through as being aggressive in what he believed in, but conservative in his approach to achieving it. The audience invariably detected his integrity and honesty. Therefore, they listened and remembered. He qualifies, I believe, as being a great lecturer.

Panel discussions were his delight. They seemed to quicken his thought processes and enabled him to express himself in response to questions. For example, a nationally known expert who was participating with him on a



FIG. 2 Photograph of the participants in the August 1981 course on Percutaneous Transluminal Coronary Angioplasty given at Emory University in Atlanta.

panel discussion indicated that he preferred bypass surgery and not balloon dilatation for a tight lesion in the left anterior descending coronary artery. The nationally known expert later changed his mind because his own experience showed that Gruentzig's points were correct. He later told me that one of his regrets was that he never had a chance to tell Dr. Gruentzig that he had changed his mind, because the plane crash prevented him from doing so.

What a role model he was. The greatest stimulus to learning is the behavior of another person who exhibits

noble attributes. Everyone who knew him realized he was unique. As each individual discovered his great attributes, he or she became a better person. This, I believe, was his greatest teaching achievement.

Auf wiedersehen, Andreas and Margaret Ann.

References

- Hurst, JW: Andreas Roland Gruentzig: The caring genius. *Cardio* (in press)