Who Are Interventionalists?
What About Surgeons?

As we launch this new journal, it is important to consider the breadth of disciplines which contribute to cardiovascular interventions. Certainly cardiovascular interventions of the traditional variety are performed by cardiologists, radiologists, pediatricians, vascular surgeons, and others. But what about cardiothoracic surgeons? Surgery has always seemed very interventional to me, yet over the years surgery and cardiology seemed to have taken different paths. Is it not time to agree that we are all interventionalists now?

Much has been said and written about the lack of support Andreas Gruentzig had for his efforts in Zurich, but we should remember that the first patients underwent angioplasty with the support and encouragement of Akè Senning and Marco Turina, the surgeons in Zurich. Senning, a pioneer himself, saw the potential for less invasive “surgery.” Indeed, the physiologic effect of surgery was the template for the development of percutaneous transluminal coronary angioplasty (PTCA).

I must admit that, after Gruentzig joined our laboratory at Emory, things were not always smooth with the surgeons. Despite a strong camaraderie, all was not smiles when PTCA cases crashed late on Fridays necessitating emergency surgery. As the most desirable surgical candidates began finding their way to the cath lab table for angioplasty, things did get a bit testy. This competition with surgery has continued in many quarters, and the optimal approach to coronary artery disease has been hotly debated. I must have participated in over 50 “debates” about the choice of surgery or percutaneous coronary intervention (PCI). Most of these, however, were characterized more by “argumentum ad hominem” than by objective discourse. Interestingly, when actual cases are presented at conferences and all the variables are considered, the debating parties usually agree on the best course of action. Trials comparing the techniques helped build the evidence that drives practice but technology is constantly changing and the evolutionary changes in cardiology have far surpassed those of surgery. The results are that PCI has rapidly grown while surgical volume is falling and training positions are left unfilled.

Although the premier programs remain competitive, overall there are more surgical positions than candidates to fill them.

Surgeons have taken full note of these shifts and realized that their specialty did not perfect its minimally invasive capabilities, but was largely mired in tradition. Now things are changing. At the Transcatheter Cardiovascular Therapeutics meeting this past October, a program of interventional techniques for the surgeon was attended by over 200. What should the response of cardiology be? Should cardiologists be threatened by the thought of surgeons elbowing their way in to the cath lab, or should this revitalized interest in minimally invasive techniques be viewed as a welcome development that can lead to more rapid advances?

A consortium representing the American College of Cardiology, the Society for Thoracic Surgery, and the Society for Cardiovascular Angiography and Interventions invited several of us to a planning session at Heart House to consider educational opportunities for interventional cardiologists and surgeons to learn together. A grant was provided and it was the job of 10 cardiologists and surgeons to figure out how to use it. I will admit that I was a bit suspicious of this initiative but the discussions brought forward some real needs for joint educational activities. The plan is for the initial meeting to concentrate on 3 areas of joint education. The first is the consideration of appropriateness for revascularization in coronary vascular disease, in which circumstance is revascularization superior to medical therapy alone, and
which revascularization method is most appropriate in various situations. This is highly pertinent now that there is an “appropriateness document” in development for myocardial revascularization. This document will be a most difficult project and one that should unite the interests of surgeons and interventional cardiologists. The second opportunity is in hybrid procedures. There is growing interest in identifying situations best served by combining minimally invasive surgical techniques with coronary stenting. The logistics and economics of these approaches are challenging, but several groups have applied these to significant advantage and many more are interested. The third educational initiative is in the study and understanding of structural heart disease and innovative minimally invasive approaches. The percutaneous and transthoracic aortic valve placement and less invasive therapies for mitral valve repair are but 2 examples that require detailed, anatomic, and functional knowledge that surgeons have been acquiring throughout their training and careers, and catheter techniques that cardiologists have mastered in other applications. It seems clear to me that combining the knowledge of these 2 disciplines may lead to the most effective solutions for structural heart disease. Several educational opportunities to explore these issues in more depth are planned in late 2008 and 2009, and it is hoped that the proceedings will produce manuscripts worthy of this journal.

And finally about this journal and its interest, it is hoped that the JACC: Cardiovascular Interventions will become a prime destination for manuscripts not only from interventional cardiology but also from surgery, be it vascular or cardiovascular surgery. We all have a great deal more to learn, and in working together we have the best chance to develop and apply effective solutions for the future. After all, we are all interventionists now.

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