EDITORIAL COMMENT

The Times They Are A-Changin’ . . . *

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The article by Hadjipetrou et al. (1) describes a single center’s experience treating symptomatic subclavian and brachiocephalic obstructive disease with percutaneous angioplasty and stenting. The report consists of 18 consecutive patients, 4 with total occlusions, treated over a 48-month period. Successful therapy with resolution of symptoms without major complications was achieved in all patients. Primary patency over a mean follow-up of 17 months was 100% and was objectively confirmed with noninvasive imaging.

The article provides a review of the literature regarding surgical therapy and percutaneous therapy for brachiocephalic obstructive disease. The authors point out that surgical therapy, the current “gold standard” of revascularization of these vessels, has never been subjected to controlled trials comparing percutaneous therapy or alternative surgical techniques. The surgical experience in this field, extending back several decades, is summarized including an analysis of more recent results over the last 10 years.

The authors do not address the issue of “primary stenting” (stent placement regardless of the balloon angioplasty result) versus “provisional stenting” (stent placement only for a suboptimal balloon angioplasty result), choosing in this series to perform primary stenting. Currently, we do not know whether placing a stent enhances a good balloon angioplasty result. Primary stenting is associated with the increased cost of the stent, the potential risk of implanting a foreign body, and the potential for adverse effects from the anticoagulant or antiplatelet regimen used to prevent stent thrombosis. Although preliminary evidence in iliac arteries suggests that provisional stenting can achieve comparable results to primary stent placement (2), this will require further investigation in other vascular territories and more patients.

Hadjipetrou et al. (1) acknowledge the difficulty and inherent limitation of comparing the results of disparate series of patients and widely varying treatment modalities. However, they make a convincing argument that primary stent therapy of these brachiocephalic vessels is at least equal, if not superior, to those reported for surgery. They emphasize that the advantages of percutaneous intervention are realized by fewer surgical and anesthesia related complications, less procedure related morbidity and a shorter hospital stay.

The significance of this study lies not only in the excellent results percutaneous intervention yields in this small number of patients; more important, the article reflects an emerging shift in the traditional management of peripheral arterial occlusive disease, whereby percutaneous and “endovascular” therapies are replacing conventional surgical procedures. Examples of this changing paradigm are evident in the management of aorto-iliac and renal artery occlusive disease. In our hospital, conventional aorto-femoral bypass and renal artery bypass are infrequent procedures, having been almost completely replaced with percutaneous interventions. The most frequent indication, in our hospital, for surgical bypass of iliac and renal artery lesions is a failed intervention, usually as a result of the inability to cross a total occlusion with a guidewire.

Not all physicians welcome the evolution of peripheral vascular revascularization strategies from conventional surgery to percutaneous “endovascular” procedures. General and vascular surgeons may ultimately face a decreasing demand for their services unless they obtain the necessary skills to perform “endovascular” surgery. Although it is prudent and appropriate for our surgical colleagues to demand evidence of the safety and efficacy of these percutaneous procedures, it is inappropriate to impede the progress of clinical trials, designed to expand the scope of percutaneous intervention, for the sake of protecting self-interest.

Peripheral vascular disease in the U.S. is underdiagnosed and undertreated at great cost to patients and society in terms of preventable morbidity and mortality. Increasing the number of physicians who can care for these patients and improving the safety and efficacy of therapeutic interventions is clearly in the best interest of our patients. Unfortunately, in many hospitals, “turf-wars” over credentials and training requirements to provide these needed services prevent many interested physicians from undertaking to meet this demand for clinical services.

Recognizing the necessity for subspecialty societies to provide guidelines specific to their specialty, the Society for Cardiac Angiography and Intervention (SCAI) has recently revised its guidelines for performing peripheral angioplasty (3). The Society has adopted a “tiered” approach, which facilitates entry into this field with “limited” certification criteria to perform iliac and renal artery intervention while concurrently maintaining the high standards established by the AHA/ACC (American Heart Association/American College of Cardiology) guidelines for “unrestricted” certifi-

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cation to perform peripheral vascular procedures. The key element of this strategy is that procedures performed under “limited” certification are counted to meet the necessary criteria for “unrestricted” certification. This provision will obviate the burdensome need for practicing physicians to leave their practice for extended periods of time in order to obtain the volume of cases required for certification.

Those who would restrict the numbers of physicians capable of caring for these patients state that standards of care will fall and patient care will be jeopardized by facilitating entry into the field of interventional peripheral vascular medicine. This is an untenable and negative point of view that does not offer a solution to the problem of meeting this underserved clinical need. Although subspecialty societies are in the best position to determine the specific needs and training requirements of their members, the hospital is responsible for quality assurance. Standards of care, measured by outcome reporting and procedural volume requirements, should be established for each hospital and applied equally to all physicians, regardless of their subspecialty. Temporary or conditional privileges to perform procedures may be granted to qualified physicians (with outcomes assessed) to assure that an acceptable quality of care is delivered.

The time has come to acknowledge the major role less invasive procedures will play in the future management of peripheral arterial occlusive disease and to responsibly facilitate the training and certification of physicians to provide these services. If we are committed to improving patient care, we cannot tolerate “protectionist” or “self-serving” training requirements that do not offer solutions, but instead preserve a “status quo” that benefits a few subspecialists to the detriment of our patients.

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REFERENCES