Editorial comment

Endovascular stent-grafts for acute and chronic type B aortic dissection: comparison of clinical outcomes

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Within the recent months, endovascular repair of aortic aneurysms has become a rather interesting alternative to patients considering open surgery. In the past, the procedure was typically and more solely reserved to a selected group of elderly patients with several co-morbidities. Currently, there are a number of ongoing trials that are comparing the performance of both surgical and percutaneous endovascular repair of aortic aneurysms. Within this field of research, I would like to personally congratulate Dr. Jing et al, for the excellence, dedication, and consistency throughout their findings and reports. Their overall research protocol and method presented in this June issue of *Journal of Geriatric Cardiology*, have been proficient and well done. 1 Because this emergency and fatal disease is rare among the general population, the number of patients available to this type of study is limited. Even with this limitation, the authors have managed to find a modest number of subjects allowing them to compare the two techniques. In spite of the obstacles facing the research, there have been more successes in regards to endovascular repair over the conventional surgical technique. 2 Their statistical inference is accurate and their subsequent conclusions are valid. These findings could pave the way for the greater and much enhanced care in future patients that have this complex and devastating problem. It should be noted that a remarkable result of their clinical experience is the absence of early mortality in their patients.

Since Volodos and colleagues performed the first endoluminal repair of a thoracic aneurysm, the technique has been used to treat descending thoracic aneurysms, type B (Stanford) aortic dissection, false aneurysms, penetrating ulcers, and aortic transections. 3 Dr. Jing et al. have been utilizing the procedure since 1998, and have been constantly evolving and refining the method throughout the years. Though incredibly promising, endoluminal repair does have its faults. The procedure lacks total proficiency through poor stent graft durability. The first published series from Stanford used home made stent grafts and reported a primary success rate of 73%. Reports of EndoVascular Aneurysm Repair (EVAR) trials have produced results that tend to demonstrate a better mortality rate in the early phase (30 days) with a progressive loss of the benefit over time after 2 years. 4 Despite these findings, Jing et al. has shown long term positive results.

Fifteen thousand thoracic aortic aneurysms are diagnosed annually. Surgical aortic resection and replacement with graft interposition has, for many years, proved the preferred method of treatment in aneurysmal lesions of thoracic aorta. Given the nature of the disease and the complications associated with surgical procedures, I would recommend that future endovascular repair of aneurysms be done by surgeons working with interventionists. The combination of the technique of interventional procedures with surgery is increasingly popular throughout treatment of the disease due to the greater number of successful outcomes. 5

References