
eComment: Endovascular treatment of chronic type A dissection

Author: Jacques Kpodonu, Northwestern Memorial Hospital, 201 East Huron Street, Galter 11-140, Chicago, IL 60611, USA
doi:10.1510/icvts.2007.165027A

I would like to congratulate the authors for a successful outcome in managing a chronic type A dissection using an endovascular stent graft [1]. The current gold standard for the treatment of a type A dissection is open surgical repair which requires a median sternotomy, use of cardiopulmonary bypass and in most cases a period of hypothermic circulatory arrest. In some instances due to the very high morbidity and mortality of open surgical repair in the elderly patient with several co-morbidities, medical management has been offered as a treatment choice. The recent advance made in endovascular technology has resulted in the technology applied to the management of various thoracic aortic pathologies. The endovascular management of the ascending aorta is still a technical challenge due to the presence of the aortic valve, coronary arteries and the brachiocephalic vessels. The technical highlights in managing the ascending aorta require that the area of pathology be excluded with sufficient aortic neck so as not to render the aortic valve incompetent as well as avoid covering the coronary arteries and the brachiocephalic vessels. The choice of endoluminal graft in most cases has to be custom made for each patient to accomplish these goals. The use of advanced imaging techniques and intravascular ultrasound can provide important information in choice, size, length and type of device as well as accurate landing zones to prevent covering the coronary arteries and or the brachiocephalic vessels and also to avoid rendering the aortic valve incompetent as initially happened in this report. Pathologies of the ascending aorta potentially amenable to endovascular treatment include penetrating aortic ulcers, acute type A dissection, chronic type A dissection and pseudo aneurysm of the ascending aorta from previous cardioplegia sites. Advanced endovascular skills are needed to tackle the ascending aorta and should not be performed by individuals or medical teams not familiar with pathologies of the aorta and not able to offer surgical management options should a complication arise.

I would once again like to congratulate the authors for a successful outcome of a difficult problem and would encourage the authors to give us follow-up since this is a new and exciting technology which has been applied to what is currently a purely surgical disease.

Reference