Thoracic & Cardiovascular Surgery Scientific Abstracts

The Philippine Heart Center Experience on Descending Thoracic Aneurysm: 8 Year Study with 42 Patients

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Background --- For the past several decades, there are many significant advances in the treatment of descending thoracic aortic aneurysm. Surgical techniques have been refined which greatly benefitted the patients who are in need of surgery, most especially those diagnosed with descending thoracic aneurysm. Several approaches have been explored such as the use of cardiopulmonary bypass with profound hypothermic circulatory arrest (HCA), proven to be an efficacious technique in the treatment of complex pathology, which may have negating consequences of coagulopathy, spinal cord injury or renal failure, thereby increasing morbidity and mortality. Conventional open reconstruction of the descending aorta is a safe and effective therapy for the management of aneurysms and is the standard by which all other therapies should be compared. The objective of this study is to review the experience of this institution on descending thoracic aneurysm for the past 8 years.

Methods --- A total of 47 patients were identified, however only 42 records of patients are made available for review. A systematic chart review was done to obtain data.

Results --- The results showed DTA were more commonly noted among male patients at approximately 3:1 ratio as compared to females. (Figure 1) As for the age distribution, about 52% of these patients diagnosed with DTA are from the age of 50 to 70. Patients who developed aneurysm are those with atherosclerotic disease, chronic aortic dissection, and connective tissue disorders such as Marfan's syndrome, Ehler-Danlos Syndrome.

The most common morbidity encountered post operatively was mainly due to the pulmonary complications, which was noted in majority of these patients who developed congestion and acute respiratory failure and becoming ventilator dependent. Consequently, majority of operated patients would stay at the hospital for more than 30 days. The ischemic and bypass time are relatively longer among patients who eventually died. The high incidence of intraoperative and post-operative mortality is associated with prolonged bypass procedures. The over-all mortality rate among DTA patients operated from January 2000 to December 2007 is 33%.

Conclusion --- With the volume of patients operated on for descending thoracic aneurysm in this Center, the operative mortality related to the disease is still high especially when dealing on an emergency basis. This is due to high mortality rate among patients with ruptured aneurysm upon presentation, prolonged bypass procedure and ischemic time. The data showed that the incidence of mortality from the previous study from 1979 and this paper are consistent and therefore recommended that surgical advancement should deal on decreasing the incidence of morbidity and mortality among patients operated on for descending thoracic aneurysm. **Phil Heart Center J 2012;16:87-8.**