ABSTRACT NO. 19

THORACIC ENDOGRAFTS FOR CHRONIC TYPE B AORTIC DISSECTIONS

Kasirajan K, Salam A
Atlanta VAMC, Atlanta, GA

Background: One-third of survivors of acute Type B aortic dissection progress to rupture or require surgical repair within 5 years. This retrospective study was undertaken to evaluate the safety and efficacy of the use of thoracic stent grafts (TSG) for treatment of chronic type B aortic dissection.

Methods: 34 patients (males 20; mean age 56 ± 3 yr) were treated over a 4-year period for proximal thoracic false lumen enlargement. The majority of patients were treated with a single component TSG (n=28 [82%]). The mean maximal thoracic aneurysm diameter was 6.9 ±1 cm. The majority (n= 25 [74%]) of patients had symptoms of chronic back pain. The mean time from the initial acute dissection was 4.3±0.8 yr.

Results: All but one patient had successful exclusion of the proximal entry point. Bypass adjuncts to improve proximal landing zone included three ascending aorta to innominate and common carotid bypasses, two carotid to carotid and carotid to subclavian bypasses, one bilateral carotid to subclavian bypass, and one total abdominal visceral vessel debranching. Perioperative complications included one sudden death, one transient paraparesis and one paraplegia. Secondary endovascular interventions were required for two patients with type II endoleaks, one with a type III endoleak, and one distal flare perforation. One patient with a proximal type I endoleak had a successful open surgical conversion. An asymptomatic proximal extension of the aortic dissection was noted in one patient 6 months after initial treatment. At a mean follow-up of 11 ± 8 mos, 31 (91%) of patients had complete false lumen thrombosis across the stented segment. Among patients with false lumen thrombosis, 25 (80%) patients had no growth in the size of the aneurysm and 6 (19%) patients had a mean 3.3 ± 1 mm decrease in the size of the maximal thoracic aortic diameter.

Conclusions: TSG appears to be a safe and effective therapy for patients with chronic type B dissection.