Midterm results of endovascular treatment in patients with complicated type B aortic dissection and malperfusion syndrome

Pusan National University Hospital, Korea Han Cheol Lee

Background: The objective is to investigate safety and mid-term clinical outcome after endovascular treatment for complicated descending AD and malperfusion syndrome.

Methods: 15 patients at our hospital were enrolled. Male was 86.7% (13/15).

Results: The study included 11 cases of acute AD type B, 3 cases of acute AD type A, and 1 case of intramural hematoma type B. A malperfusion syndrome involved 4 cases of celiac artery, 1 case of superior mesenteric artery, 6 cases of renal artery, 6 cases of iliac artery, 2 cases of common carotid artery, 1 case of left subclavian artery. 7 cases were also treated with aortic stent graft along with treating a malperfusion syndrome. The number of treating lesions was 19, including 1 left subclavian a stenting, 3 celiac stenting, 6 renal stenting, 6 iliac a stenting, 2 right common carotid a stenting, and 1 distal abdominal aorta stenting. The technical success was 100%(15/15). There was no death within first 24hrs and periprocedure events. However,7(45.7%, 7/16) cases of procedure related complications had occurred, including 4 cases of contrast induced nephropathy and 3 cases of anemia required transfusion. The mortality rate within index period was 6.6%(1/15), not related procedure itself nor disease entity. There was no major neurologic complication except 1 case of transient ischemic attack. The event rate during follow up period was 0% (0/15). Mean follow up duration was 17.2 (0.4-37.7) months.

Conclusion: Endovascular treatment for complicated aortic dissection and malperfusion syndrome was a safe procedure with good mid-term clinical outcomes.