

proximally and distally may be safer than performing multiple thoracotomies in patients with Marfan syndrome. However, it has been suggested that stent grafts should not be deployed in either the abdominal or thoracic aorta in patients with this syndrome or another connective tissue disease [6].

In our patient with Marfan syndrome, a right subclavian-axillary artery aneurysm, and an aortic arch aneurysm, we used a hybrid repair. Before placing endoprostheses in the right subclavian artery and aortic arch, we performed an open surgical procedure to replace the arch with a synthetic graft. Therefore, the proximal and distal landing zones for the stent grafts were within prostheses, which avoided possible injury to the aortic wall caused by the radial force applied by stent grafts.

Our patient had previously undergone repair of a pseudoaneurysm at the anastomosis to the intercostal arteries. The procedure involved reconstruction of the middle portion of the Dacron graft present in the descending aorta by replacement of another synthetic graft with the use of a side-to-end anastomosis. Moreover, a femorofemoral bypass was performed concomitantly with the dissection of the aorta. Because of these factors, we decided to avoid delivering a stent graft in a retrograde direction—that is, through the femoral artery to the aortic arch. Instead, we replaced the aortic arch with a branched Dacron graft (elephant trunk technique) and then deployed a thoracic stent graft in an antegrade manner, through a branch of the Dacron graft. The elephant trunk thus served as the proximal neck for the stent graft, whereas the graft in the descending aorta served as the distal neck. Because a graft that extended from the aortic root (including the aortic valve) to the ascending aorta and a graft that extended from the descending aorta to the abdominal aorta were already in place, our procedure resulted in replacement of the entire aorta with prostheses.

We thank Renée J. Robillard for editorial assistance and Japan Gore-Tex (Tokyo, Japan) for providing funding for this assistance.

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Spontaneous Triple Coronary Artery Dissection

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Multivessel spontaneous coronary artery dissection (SCAD) is extremely rare, and to the best of our knowledge, triple-vessel dissection has been reported in only 7 patients to date. We present the successful surgical treatment of the triple coronary artery dissection in a 57-year-old man. The patient had aortic valve replacement simultaneously. Triple SCAD is a rare and life-threatening condition, and long-term results are necessary for an optimum treatment approach. It should be kept in mind that triple SCAD may be more common and fatal than thought, as uninvestigated cases of sudden death could mask the true incidence and prognosis of triple SCAD.

(*Ann Thorac Surg* 2013;95:1443–5)

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Spontaneous coronary artery dissection (SCAD) is a rare condition that has been found to be associated with various pathophysiologic situations, such as pregnancy, postpartum, collagen diseases, cocaine abuse, severe hypertension, smoking, oral contraceptives, heavy exercise, or vasospasm. Approximately 70% of patients have dissection in a single coronary artery, and the left anterior descending artery is the most involved one [1]. Multivessel dissection is extremely rare, and triple-vessel dissection has been reported in only 7 patients to date. In this report, we present the successful surgical treatment of spontaneous dissection of each three coronary arteries in a patient without cardiovascular disease history and analyze previously reported triple SCAD cases.

A 57-year-old man was admitted to our emergency department with sudden onset of constricting chest pain. The physical examination was unremarkable except for a diastolic heart murmur on the left sternal border; electrocardiography showed nonspecific ST-segment changes as negative T waves on lead V1, flattened T waves on leads V2 through 4, and minimally depressed ST-segment on leads V5 and 6. Echocardiography was performed, and global hypokinesia of the left ventricle and severe aortic regurgitation was seen; the ascending aorta and the root of the aorta were normal; and the left ventricle ejection fraction was calculated as 35% using the modified Simpson formula. The patient was diagnosed as having acute coronary syndrome and taken to the catheterization laboratory immediately.

Accepted for publication Aug 20, 2012.

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大動脈疾患症例の実態解明・効果的な進行予防・治療を目的とした全国的統一
基盤システムの構築と研究 研究班

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