

A Case of Subclavian Artery Stenosis

林麗芳

阮綜合醫院 內科部

Introduction

Subclavian artery stenosis usually presents with weak or absent radial and ulnar pulses, and ipsilateral reduced blood pressure (>20 mm Hg) when compared to the contralateral arm. In autopsy series, 9% of the population demonstrate stenosis or occlusion of one subclavian artery, usually on the left. Two percent of cerebral angiograms demonstrate asymptomatic subclavian steal. Usually it is due to atherosclerotic changes of the vessels. The risk factors include old age, smoking, hypertension, diabetes mellitus type II, and dyslipidemia.

Case Presentation

A 74-year-old female with past medical history of diabetes type II, hypertension, hypercholesterolemia, peptic ulcer, and colon cancer s/p op presented to our cardiology department for symptoms of dizziness with exercise. In the clinic, difference of blood pressure measurement in both arms was significant. Blood pressure measured in right arm was 180/100 mmHg, and in the left arm was 150/100 mmHg. Patient had been taking Nifedipine and Losartan from his primary care physician for blood pressure control. In suspicion of subclavian artery stenosis, CT angiography was done and showed left subclavian artery stenosis. Anti-hypertensive medication was adjusted to Nifedipine and Acertil. However, patient did not respond to the treatment well after two months of medical treatment. Patient presented with worsening dizziness. Hence left subclavian artery stenting was done. After the treatment, patients dizziness resolved. Blood pressure measured to be 148/98 mmHg in the right arm, and 144/90 mmHg in the left arm

Conclusion

Subclavian artery stenosis is a diagnosis that should not be overlooked. Treatment of subclavian artery stenosis could be stenting and endarterectomy. Angioplasty and stenting of stenotic and even occluded arteries have been undertaken successfully with adequate patency rates and minimal morbidity. These interventions are particularly appropriate for atherosclerotic arteries. The results from stenting procedures on the subclavian artery document an 87% patency rate after 3 years. Operative outcomes demonstrate about a 90% patency rate after 5 years.