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## **Clinical case blog**

Title: Blood Pressure Difference of more than 100 mmHg between Arms caused by Stenosis of the Brachiocephalic Trunk

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A 78-year-old woman with hypertension and diabetes mellitus was admitted to the Department of Internal Medicine with fatigue. There was a profound difference in blood pressure between her right (116/97 mmHg) and left arms (231/126 mmHg). The patient's physical examination was otherwise unremarkable. A difference of 10 mmHg or higher, or of 15 mmHg or more, between arms can identify patients at a high risk of asymptomatic peripheral vascular disease and mortality who may benefit from further assessment [1]. Therefore, the patient underwent three-dimensional computed tomography (3D CT) and arch aortography to detect the presence of narrowing or hardening of the arteries. 3D CT revealed severe brachiocephalic trunk calcification (Panel A-C), and on contrast examination, 99% stenosis was observed in the brachiocephalic trunk, which was determined to be the cause of the blood pressure difference (Panel D).

## Reference

1. Clark CE, Taylor RS, Shore AC, Ukoumunne OC, Campbell JL (2012) Association of a difference in systolic blood pressure between arms with vascular disease and mortality: a systematic review and meta-analysis. Lancet; 379: 905-914.

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