

☆ **Complex Clinical Cases**

SEVERE AORTIC COARCTATION WITH OBSTRUCTION OF AN EXTRA-ANATOMIC TUBE

Poster Contributions
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Background: Aortic coarctation (CoAo) is rare (3 in 10,000 births), characterized by a narrowing of the aortic lumen, which may progress with collateral arteries. When systolic pressure gradient (SBP) exceeds 20 mmHg, intervention becomes necessary.

Case: 45-year-old woman investigating resistant hypertension was diagnosed with severe CoAo, aortic interruption, a substantial collateral network, and bicuspid aortic valve at the age of 36 (2014). In 2017, she underwent surgical treatment with implantation of an extra-anatomic tube connecting the ascending and descending aorta. Angiotomography (CTA) in 2022 confirmed patency of the tube. In 2023, she presented with asthenia, paraparesthesia of the lower limbs, and symptomatic hypertensive episodes. Echocardiogram saw a monophasic flow in the abdominal aorta and CTA revealed occlusion of the tube with an extensive collateral network. Clinical gradient pressure at this moment was greater than 50 mmHg.

Decision-making: It was decided to perform a surgical reoperation with the implantation of a new lateral extra-anatomic tube bypassing the interruption through a thoracolateral incision. The procedure was uneventful and blood pressure was effectively managed.

Conclusion: CoAo should be considered in the differential diagnosis of young individuals with hypertension. Invasive interventions contribute to blood pressure control and reduction of complications. Regular clinical and radiological follow-up is required throughout patient's life.

