Surgery for severe aortic coarctation in a 55-year-old female patient

Elli beş yaşında kadın hastada ciddi aort koarktasyonu cerrahisi

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Aortic coarctation is a segmental narrowing of the descending aorta which commonly located distally to the origin of the left subclavian artery. This congenital anomaly is frequently diagnosed and treated in childhood; however, it can be left undiagnosed until adulthood. In this article, we present a 55-year-old female case with severe aortic coarctation with 30 mmHg gradient, distal to the origin of the subclavian artery with post-stenotic dilatation (Figure 1). Computed tomography angiography revealed calcification and aortic wall irregularities of pre-coarctation segment (Figure 2a) despite no changes in post-coarctation segment (Figure 2b). She was on anti-hypertensive therapy for almost 20 years. Transthoracic echocardiography revealed severe aortic valve stenosis with a mean gradient of 52 mmHg and 42 mm ascending aorta. The patient underwent graft bypass surgery with left posterolateral thoracotomy. A 16 polytetrafluoroethylene tubular graft was anastomosed distally to the origin of the

Figure 1. Computed tomography angiography showing severe aortic coarctation and post-stenotic dilatation.

Figure 2. Computed tomography angiography of pre-coarctation and post-coarctation segment (2a: Arrow shows calcification and wall irregularities of pre-coarctation segment, 2b: There is no changes on aortic wall of post-coarctation segment).
left subclavian artery using side biting clamp and distal part of the graft was anastomosed beneath the aneurysmatic segment of the descending aorta. Postoperative period was uneventful. Beta-blocker monotherapy was used to control the blood pressure. Surgery was planned for aortic valve disease. Aortic coarctation is rarely seen in adult patients. Graft bypass is a safe and effective treatment.

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**REFERENCES**