

## Percutaneous coronary intervention performed for the revascularization of a single coronary artery originating from the right sinus of Valsalva

*Sağ sinüs Valsalva'dan köken alan tek koroner arterin revaskülarizasyonu için yapılan perkütan koroner girişim*

A single coronary artery consists of 5-20% of major coronary artery anomalies and has an incidence of 0.024% in angiographic series. Percutaneous coronary intervention (PCI) has recently been suggested as a good treatment modality in patients with a single coronary artery originating from right sinus of Valsalva.

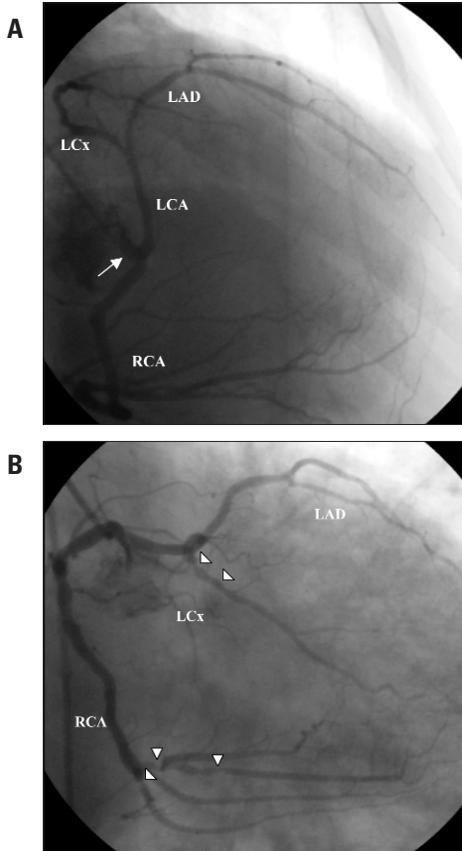
We present a 62-year-old male with a history of hypertension, prior inferior myocardial infarction and PCI for the right coronary artery (RCA). He was admitted with new onset exertional angina pectoris. Coronary angiography showed a single coronary artery originating from a single ostium in the right

sinus of Valsalva (Fig. 1A). Severe stenosis was shown in the five different locations in the left circumflex artery (LCx) and the RCA (Fig. 1B). Because he had limiting angina despite maximal medical treatment, PCI was ordered. The main coronary artery was cannulated towards the RCA with a right guiding catheter. The guiding catheter was pulled back and introduced into the left coronary artery (LCA) after a slight counter-clockwise rotation. The guiding catheter support was adequate during PCI of both LCx and RCA (Fig. 2). We performed PCI for the RCA two days later (Fig. 3, Video 1. See corresponding video/movie images at [www.anakarder.com](http://www.anakarder.com)). After six months, stress electrocardiography was normal. The patient has been asymptomatic and free of angina pectoris up to eight months of follow-up.

We believe that PCI can be regarded as simple, safe and effective method of revascularization for atherosclerotic disease of a single coronary artery.

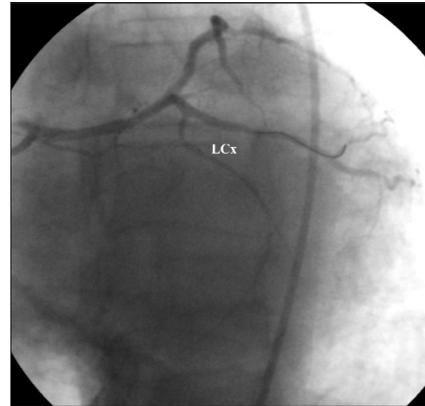
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**Figure 1A.** A single coronary artery that originated from a single ostium (arrow) in the right sinus of Valsalva divided in to the right coronary artery (RCA) and left coronary artery (LCA) after a short main segment (arrow). **B.** The stenotic lesions (arrow heads) in the proximal and midportion of the left circumflex artery (LCx) and side branches of the right coronary artery (RCA).

RCA- right coronary artery, LCA- left coronary artery, LCx- left circumflex artery, LAD- left anterior descending artery



**Figure 2.** The left circumflex artery (LCx) after a direct stent implantation and the percutaneous transluminal coronary angioplasty. The LCx was carefully inspected to exclude possible dissections, especially proximal to the stent, before pulling back the 0.14 mm guidewire

LCx- left circumflex artery



**Figure 3.** The PCI of the right coronary artery (RCA). Stent implantation was avoided because of small size of the side branches of the RCA