



## IMAGE IN CARDIOLOGY

# Utility of catheter extension devices in coronary artery anomalies

## Utilidade dos extensores do cateter em anomalias coronárias

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We report the case of a 72-year-old woman with a history of hypertension and dyslipidemia, who came to the outpatient clinic complaining of chest pain. Exercise stress test was positive. Coronary angiography (Figure 1A) by radial approach showed a right coronary artery (RCA) with an anomalous origin at the left sinus of Valsalva, next to the origin of the left main coronary artery, with severe stenosis in the middle segment (arrow). Due to its anomalous origin, selective catheterization of the RCA could not be achieved with any type of guide catheter; the Amplatz-Left-1 allowed the best approach. The use of a catheter extension device (Figure 1B, arrow) enabled selective intubation of the anomalous ostium, advancing the angioplasty balloon and pre-dilation of the stenosis. Subsequently, with the help of the catheter extension device, we implanted a drug-eluting stent in the RCA (Figure 1C) with an excellent final angiographic result (Figure 1D).

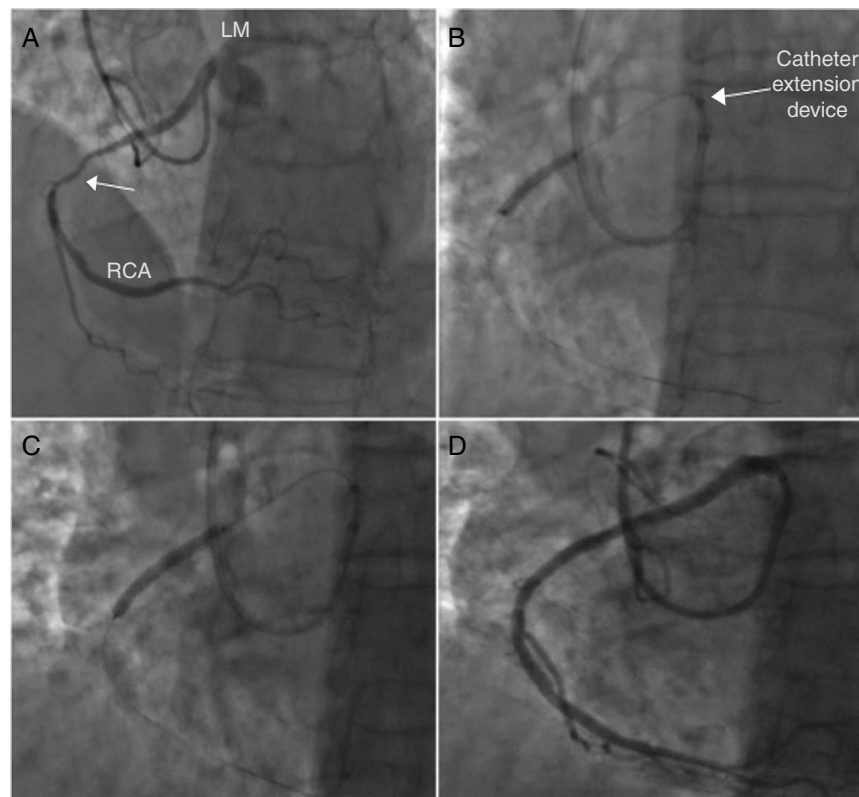
Interventional cardiologists face a number of technical challenges when attempting to treat anomalous coronary arteries. The very low incidence of anomalies and the unique characteristics of each one make it essential to individualize the approach in each patient, with the correct selection of the guiding catheter and the use of alternative techniques and devices being particularly important. In our case, the use of the catheter extension device permitted selective catheterization of the anomalous coronary artery and provided us with sufficient support to successfully perform the angioplasty.

### Conflicts of interest

The authors have no conflicts of interest to declare.

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**Figure 1** (A) Right coronary angiography showing an anomalous origin and severe stenosis in the middle segment (arrow). (B) Right coronary catheterization using the catheter extension device. (C) Stent delivery. (D) Final angiographic result.