Images in Cardiology

Kardiyolojide Görüntüler

A large intercoronary communication in a case with coronary artery disease: a rare entity

Koroner arter hastalığı bulunan bir olguda büyük interkoroner bağlama:
Nadir bir durum

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An 85-year-old male patient presented with chest pain. Electrocardiography revealed normal sinus rhythm with Q waves and ST segment changes in V1-V6 derivations, suggesting previous anterior myocardial infarction. Selective left coronary angiography showed 60% stenosis in the proximal left anterior descending (LAD) artery, 95% stenosis at the level of the first diagonal branch, and 50% stenosis at the beginning of the first diagonal branch. In selective right coronary angiography, simultaneous retrograde filling of the LAD was observed and an extraordinary large intercoronary artery connection (IAC), 2.5 mm in diameter, was noted between the right coronary (RCA) and LAD arteries (Fig. 1). The posterior descending artery extended with its whole width and retrogradely filled the LAD vessel from the apex to the first diagonal branch. The angiographic appearance of the connection was relatively straight and regular.

Coronary collaterals measure 20 to 350 µ in diameter. They are not routinely visualized during coronary angiography. Collaterals and IACs appear to be different. In the presence of severe myocardial ischemia, these collaterals undergo progressive dilatation in an attempt to minimize myocardial ischemia. They are usually less than 1 mm in diameter, appearing tortuous and twisted. On the contrary, IACs tend to be straight or slightly curved.

In the literature, 12 cases of angiographically visible IACs have been reported, the largest one being 1.6 mm in diameter. To our knowledge, this case represents the largest IAC between the RCA and LAD arteries.