Turkish Journal of Thoracic and Cardiovascular Surgery

## **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 bağlantı: Nadir bir durum

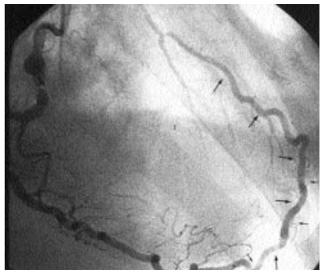
Feridun Koşar,<sup>1</sup> Nevzat Erdil,<sup>2</sup> İbrahim Şahin,<sup>3</sup> Vedat Nisanoğlu,<sup>2</sup> Hakan Güllü,<sup>1</sup> Bektaş Battaloğlu<sup>2</sup>

İnönü Üniversitesi Turgut Özal Tıp Merkezi,

<sup>1</sup>Kardiyoloji Anabilim Dalı, <sup>2</sup>Kalp ve Damar Cerrahisi
Anabilim Dalı, <sup>3</sup>Endokrinoloji Anabilim Dalı, Malatya

An 85-year-old male patient presented with chest pain. Electrocardiography revealed normal sinus rhythm with Q waves and ST segment changes in V<sub>1</sub>-V<sub>6</sub> 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  $350\,\mu$  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





**Fig. 1.** Arrows show a large communication between the right coronary artery and the left anterior descending artery.

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.