


33. Denardo SJ, Davis KE, Reid PR, Tcheng JE. Efficacy and safety of minimal dose (~ or =1,000 units) unfractionated heparin with abciximab in percutaneous coronary intervention. Am J Cardiol 2003;91:1–5.


Clinical vignette

A prominent coronary Thebesian system

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A 46-year-old male patient with hypertension and diabetes mellitus presented with chest pain and dyspnoea. He had previously received percutaneous coronary intervention for a proximal left anterior descending coronary artery lesion. However, even after stent implantation, he had recurrent effort angina with dyspnoea. Coronary angiography showed a widely patent stent in the mid-left anterior descending coronary artery and an incidental finding of multiple fistulas between the left coronary artery and the left ventricle (Panels A–D). Note the appearance of multiple minute inter-trabecular vessels after injection of contrast agent into the coronary artery that drain into the left ventricle resulting in the appearance of a left ventriculogram. This is a rare form of coronary fistula where multiple fistulas exist between coronary arteries and the left ventricle. Such arterioventricular fistula is presumed to be due to a prominent coronary Thebesian system and was first reported in 1974. Although the Thebesian system is not familiar to cardiologists, cardiothoracic surgeons recognize the Thebesian system as a route where significant amounts of retrograde cardioplegia can be shunted to the ventricles. It has been well documented in canine hearts, yet the clinical significance of its existence in humans is not clear.

Panels A–D. Right anterior oblique caudal projection of the left coronary artery. After injection of contrast agent into the left coronary artery (Panel A), note the appearance of multiple minute inter-trabecular vessels at the apex of the left ventricle (Panel B) that drain into the left ventricle resulting in the appearance of a left ventriculogram (at diastole: Panel C and at systole: Panel D).