In October 1993, a 67-year-old patient with hypertension underwent emergency surgery for Type A aortic dissection with cardiac tamponade. The dissection extended to both coronary arteries and was associated with annuloaortic ectasia with severe aortic regurgitation.

The intervention consisted of aortic valve replacement with a 25-mm Carbomedics metal prosthetic valve (Figure 1, a), complete replacement of the ascending aorta with a 30-mm Dacron tube (Figure 1, b) and reimplantation of the coronary arteries using the Cabrol technique. The 2 coronary ostia were attached by end-to-end anastomosis using a continuous suture to the end of a second 8-mm-diameter Dacron tube (Figure 1, c), which was then anastomosed to the anterior wall of the prosthetic aortic valve and run circumferentially around the prosthesis to the two ostia.

The patient was asymptomatic for nine years. Recently, he presented dyspnea on exertion. On computed tomography scanning, a 7-cm-diameter pseudoaneurysm (Figure 1, d) affecting both tube grafts (aortic and coronary) was observed. Coronary angiography showed compression and flattening of the right branch of the coronary tube and partial detachment of the sutures with both ostia, as well as significant blood leakage, with a broad jet in the left ostium (Figure 1, e and Figure 2) and 2 narrow jets in the right ostium (Figure 1, f and Figure 3) that drained the cavity of the pseudoaneurysm, which presented high-velocity flow and partial mural thrombosis.

The patient was reoperated in January 2003. Direct suturing was performed to close the anastomotic leaks and it was seen that the fistula was thrombosed with the right atrium.

Pseudoaneurysm of the Ascending Aorta Due to Coronary Anastomosis Leaks

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