Six years after repair of a giant ascending aortic aneurysm

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A 34-year-old man was seen with extreme shortness of breath. Echocardiography showed aortic aneurysm, severe aortic regurgitation, and poor left ventricular function. Chest computed tomography revealed a 13-cm wide ascending aortic aneurysm (Figure 1). The aneurysm involved all the sinuses of Valsalva, causing cephalad displacement

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FIGURE 1. *Top.* Preoperative computed tomographic image showing the 13-cm ascending aortic aneurysm (Asc aneu), larger than the heart. The neck of the aneurysm was before aortic branching; this positioning facilitating central cannulation and clamping. *Bottom.* Preoperative computed tomographic image illustrating how much larger the huge ascending aortic aneurysm was than the heart.

FIGURE 2. Postoperative 3-dimensional reconstructed computed tomographic image showing the Dacron polyester fabric graft and the right coronary artery.

of the coronary ostia. With central cannulation and retrograde coronary sinus cardioplegia, a size 31 composite graft was sewn to the aortic root with multiple pledgeted 2-0 sutures. The left and right coronary ostia were buttoned and anastomosed to the appropriate sites in the Dacron polyester fabric graft with 7-0 monofilament sutures. This patient has been followed up for longer than 6 years with no complications and is leading a nearly normal life with dramatic improvement in ejection fraction and renal function (Figures 2-4). This is the largest ascending aortic aneurysm reported to date in the literature.

FIGURE 3. Sagittal section of the composite graft.

FIGURE 4. Cross section showing the left coronary artery.