Image in cardiology

Percutaneous Repair of a Giant Aortic Aneurysm

Reparación percutánea de aneurisma aórtico gigante

Javier Suárez de Lezo, Miguel Romero,* and Jorge Chavarría

Servicio de Cardiología, Hospital Universitario Reina Sofía, Córdoba, Spain



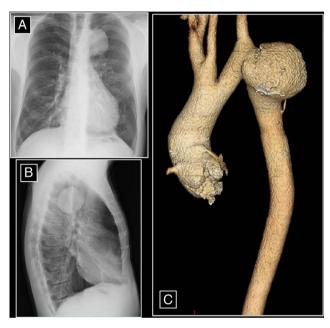


Figure 1.

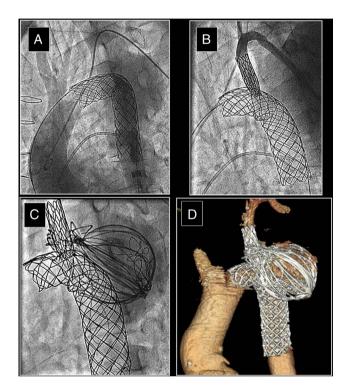


Figure 2.

A 43-year-old man was diagnosed at birth with a severe aortic coarctation that was surgically treated in infancy. He had a favorable clinical course, normal growth, and no evidence of heart failure. However, at the age of 7 years, he was diagnosed with restenosis of the coarctation and mild subaortic membrane stenosis. At the age of 9 years, the patient underwent surgery for the recoarctation, with resection of the recoarctated segment and an end-to-end anastomosis. At the age of 11 years, he required a new surgical intervention to treat the subaortic membrane stenosis, which had progressed to a severe state. The patient had a good clinical course and stopped attending successive follow-up visits until, at the age of 43 years, a routine chest radiograph showed a huge aneurysm in the aortic arch. The chest plain film and computed tomography image before the intervention are shown in Figure 1. A "tailor-made" covered stent (135 mm length \times 20 mm diameter) was ordered and implanted in the aorta in an attempt to exclude the aneurysm (Figure 2A). By perforating the synthetic material from the left subclavian artery with a metal guidewire captured in the aorta, blood flow toward the subclavian was re-established. A new covered stent was implanted in the origin (8 \times 34 mm; Figure 2B). The aneurysm was partially excluded and thrombosed, but a small leak persisted. At 1 year following the procedure, the residual cavity was probed and filled with coils and teflon-covered metal wires, which achieved complete exclusion of the aneurysm (Figure 2C,D).

^{*} Corresponding author: E-mail address: mromero@grupocorpal.com (M. Romero). Available online 17 January 2018