Endovascular repair of a late pseudoaneurysm after an extra-anatomic bypass for aortic coarctation

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Figures 1 and 2 describe the management of a 47-year old patient presenting with a chronic false aneurysm after an extra-anatomic bypass placed for aortic coarctation during childhood. The condition was treated with two covered stents of decreased diameters and an hourglass-shaped plug. Post-procedure and control imaging at 1 year showed no complications.

Figure 1: Preoperative findings. (A) Three-dimensional (3D) magnetic resonance imaging reconstructed image, (B and C) two-dimensional (2D) computed tomography (CT) scan and 3D CT scan reconstructed images. It shows a distal pseudoaneurysm of the aorto-aortic bypass and persistence of blood flow through the native coarcted aorta.

Figure 2: Operative procedure, immediate and late results. (A–E) Peri-procedural aortography aortography showing an initial distal pseudoaneurysm treated by two covered endovascular stent grafts into the aortic bypass and the plug added at the end of the procedure. (F) A 3D CT scan showing the post-procedural result at 3 days. (G) A 3D MRI reconstructed image showing the latest result at 1 year.

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