Infectious pseudoaneurysm at the proximal edge of the endograft, after hybrid aortic arch repair

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Received 5 March 2013; received in revised form 27 March 2013; accepted 28 March 2013

Keywords: Hybrid aortic arch repair • Thoracic endovascular aortic repair • Pseudoaneurysm

A 77-year old woman who underwent hybrid aortic arch repair using a Gore-TAG (Gore-Associates, Flagstaff, AZ, USA) endograft (Fig. 1A) complained of chest pain 5 months after operation. Blood cultures revealed Serratia marcescens. Computed tomography (CT) demonstrated dislocation of the endograft with formation of a pseudoaneurysm (Fig. 1B). Ascending aorta replacement with re-debranching was emergently performed (Fig. 2).

Figure 1: (A) Three-dimensional imaging after primary surgery (hybrid aortic arch repair). Arch branches were reconstructed by two grafts anastomosed to the ascending aorta. Thoracic endograft fits conformably to the curvature of the aortic arch, showing no ‘bird-beak sign’. (B) CT demonstrating pseudoaneurysm at the proximal edge of the endograft (arrow) associated with anterior dislocation of the endograft.
Figure 2: CT after ascending aorta replacement and re-debranching. The ascending aorta was replaced using a four-branched woven, Dacron graft (30-mm J-graft: Japan Lifeline Co. Ltd., Tokyo, Japan). Two-arch vessel bypasses were reconstructed (arrow). A proximal edge of the endograft was partially trimmed and anastomosed to the Dacron graft. We also deployed a Gore-TAG endograft (Gore-Associates) intraoperatively to assure the distal fixation of the old endograft.