

Images in cardio-thoracic surgery

Full metal jacket for thoracoabdominal aneurysm

Bettina Marty^{a,*}, Ludwig Karl von Segesser^a, Daniel Guntern^b, Salah Dine Qanadli^b

^a Department of Cardio-vascular Surgery, University Hospital CHUV, Rue de Bugnon 46, 1011 Lausanne, Switzerland

^b Department of Radiology, University Hospital, 1011 Lausanne, Switzerland

Received 5 July 2005; received in revised form 14 August 2005; accepted 23 August 2005; Available online 7 November 2005

Keywords: Aorta; Aneurysm; Endovascular; Technique

Open repair was refused by a 60-year-old man with a symptomatic thoracoabdominal aortic aneurysm (Fig. 1), previous thoracic aneurysm repair and renal insufficiency. Therefore, a hybrid technique including visceral debranching and endovascular aneurysm exclusion was used (Fig. 2). There were no complications and discharge was on the ninth day.



Fig. 1. A 6 cm type IV aortic aneurysm (arrow).

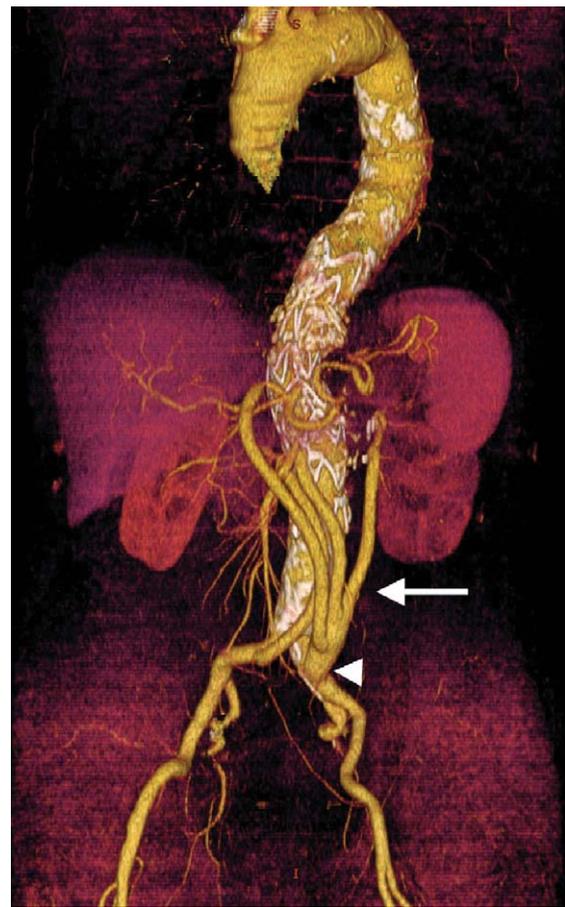


Fig. 2. The different steps of the single procedure. (1) Through a median laparotomy limbs of a bifurcated polyester prosthesis (diameter 14 mm × 7 mm) were anastomosed end-to-side to the four main visceral arteries (arrow). (2) Proximal anastomoses (arrowhead) were performed to both common iliac arteries. Using two donor vessels the risk of abdominal ischemia is likely to be reduced or mitigated in case of inflow problems. (3) Subsequent aneurysm exclusion was achieved by two endovascular tube grafts inserted via the right femoral artery. (4) Thereafter, the visceral arteries were ligated at their origin. The present follow-up computed tomographic angiography at six months shows patency of all four bypasses and aneurysm exclusion without an endoleak.

* Corresponding author. Tel.: +41 21 314 2316; fax: +41 21 314 2278.
E-mail address: martyb@hopcantfr.ch (B. Marty).