A big cover-up

C Malkin and J Gunn

Heart 2009 95: 1354
doi: 10.1136/hrt.2009.171843

28. **Warkentin TE,** Sheppard JI. No significant improvement in diagnostic specificity of an anti- PF4/polyanion immunoassay with use of high heparin confirmatory procedure. *J Thromb Haemost* 2006;**4**:281–2
29. **Warkentin TE,** Levine MN, Hirsh J, *et al*. Heparin-induced thrombocytopenia in patients treated with low-molecular weight heparin or unfractionated heparin. *N Engl J Med* 1995;**332**:1330–5
30. **Warkentin TE,** Roberts RS, Hirsh J, *et al*. An improved definition of immune heparin-induced thrombocytopenia in postoperative orthopedic patients. *Arch Intern Med* 2003;**163**:2514–8
31. **Khairy M,** Lasne D, Brohard-Bohn B, *et al*. A new approach in the study of the molecular and cellular events implicated in heparin-induced thrombocytopenia. Formation of leukocyte–platelet aggregates. *Thromb Haemost* 2001;**85**:1090–6.
32. **Pena de la Vega L,** Miller RS, Benda MM, *et al*. Association of heparin-dependent antibodies and adverse outcomes in hemodialysis patients: a population based study. *Mayo Clin Proc* 2005;**80**:995–1000.
33. **Chilver-Stainer L,** Lammle B, Alberio L. Titre of anti-heparin/PF4-antibodies and extent of in vivo activation of the coagulation and fibrinolytic systems. *Thromb Haemost* 2004;**91**:76–282.

Images in cardiology

A big cover-up

A woman in her early 40s presented with an 18 h history of chest pain which worsened on the day of admission. The ECG showed an acute inferior myocardial infarction. Coronary angiography demonstrated a totally occluded, dominant, right coronary artery (panel A). A thrombus extraction catheter was deployed (panel B). Some material was removed but, despite several passes of the device, the artery remained occluded. Deployment of a 2.0 mm calibre balloon led to restoration of antegrade flow, the thrombus behaving in a resistant, ''rubbery'', fashion (panel C). Concern that stent insertion would lead to distal embolisation prompted selection of a novel stent graft, 4×27 mm in size, to trap the thrombus. The device consists of a single, conventional, 316L stainless steel stent to which processed equine pericardium is sutured. After thorough rinsing, the device was positioned with generous overhang across the thrombotic lesion. The deploying balloon is designed to ''dog-bone'' at 5 atm pressure, thereby sealing the ends of the stent graft to the vessel wall, trapping any material (panel D). Post-dilatation was achieved with a second, conventional balloon, in this case measuring 4.5×32 mm, a length selected to avoid extrusion of debris (panel E).

The final result was excellent, with brisk blood flow, no evidence of embolisation and mild coronary artery spasm (panel F). Close examination of the final stent graft appearance revealed a ''cobblestone'' effect, presumably representing material trapped behind the pericardial membrane, causing it to bulge out from between the stent struts (panel G). Oral antiplatelet agents only were used. The patient was discharged from hospital on day 3.

This device offers an alternative therapeutic option when thrombus aspiration fails. Unlike previous stent grafts, it is highly trackable, making deployment easy.

C Malkin, J Gunn

j.gunn@sheffield.ac.uk

Heart 2009;**95**:1354. doi:10.1136/hrt.2009.171843