- 34 Perez-Gomez F, Alegria E, Berjon J, et al. Comparative effects of antiplatelet, anticoagulant, or combined therapy in patients with valvular and nonvalvular atrial fibrillation: a randomized multicenter study. J Am Coll Cardiol 2004:44:1557–66.
- 35 Hart RG, Pearce LA, Rothbart RM, et al. Stroke with intermittent atrial fibrillation: incidence and predictors during aspirin therapy. Stroke Prevention in Atrial Fibrillation Investigators. J Am Coll Cardiol 2000;35:183–7.
- 36 Gallagher MM, Hennessy BJ, Edvardsson N, et al. Embolic complications of direct current cardioversion of atrial arrhythmias: association with low intensity of anticoagulation at the time of cardioversion. J Am Coll Cardiol 2002:40:926–33.
- 37 Sherman DG, Kim SG, Boop BS, et al. Occurrence and characteristics of stroke events in the Atrial Fibrillation Follow-up Investigation of Sinus Rhythm Management (AFFIRM) Study. Arch Intern Med 2005;165:1185–91.
- 38 Flaker GC, Belew K, Beckman K, et al. Asymptomatic atrial fibrillation: demographic features and prognostic information from the atrial fibrillation follow-up investigation of rhythm management (AFFIRM) Study. Am Heart J 2005;149:657–63.
- Weigner MJ, Caulfield TA, Danias PG, et al. Risk for clinical thromboembolism associated with conversion to sinus rhythm in patients with atrial fibrillation lasting less than 48 hours. Ann Intern Med 1997;126:615–20.
- 40 Staddard MF, Dawkins PR, Prince CR, et al. Transesophageal echocardiographic guidance of cardioversion in patients with atrial fibrillation. Am Heart J 1995;129:1204–15.
- 41 Rockson SG, Albers GW. Comparing the guidelines: anticoagulation therapy to optimize stroke prevention in patients with atrial fibrillation. J Am Coll Cardiol 2004;43:929–35.

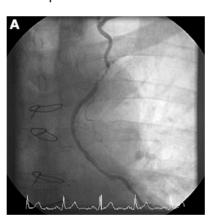
- 42 Lip GYH, Lane D, van Walraven C, et al. The additive role of plasma von Willebrand factor levels to clinical factors for risk stratification in patients with atrial fibrillation. Stroke 2006;37:2294–300.
- 43 Evans A, Perez I, Yu G, et al. Secondary stroke prevention in atrial fibrillation: lessons from clinical practice. Stroke 2000;32:2106–111.
- 44 Hart RG, Tonarelli SB, Pearce LA. Avoiding central nervous system bleeding during antithrombotic therapy: recent data and ideas. Stroke 2005;36:1588–93.
- 45 Shireman TI, Howard PA, Kresowik TF, et al. Combined anticoagulantantiplatelet use and major bleeding events in elderly atrial fibrillation patients. Stroke 2004;35:2362–7.
- 46 Silber S, Albertsson P, Aviles FF, et al. Guidelines for percutaneous coronary interventions: the task force for percutaneous coronary interventions of the European Society of Cardiology. Eur Heart J 2005;26:804–47.
- 47 Lip GYH, Karpha M. Anticoagulant and antiplatelet therapy use in patients with atrial fibrillation undergoing percutaneous coronary intervention: the need for consensus and a management guideline. *Chest* 2006;130:1823–7.
- 48 Kakar P, Lane D, Lip GYH. Bleeding risk stratification models in deciding on anticoagulation in patients with atrial fibrillation: a useful complement to stroke risk stratification scheme. *Chest* (in press).
- 49 Sawicki PT. A structured teaching and self-management program for patients receiving oral anticoagulation: a randomized controlled trial. Working Group for the Study of Patient Self-Management of Oral Anticoagulation. JAMA 1999;281:145–50.
- 50 Fitzmaurice DA, Machin SJ, British Society of Haematology Task Force for Haemostasis and Thrombosis. Recommendations for patients undertaking self management of oral anticoagulation. BMJ 2001;323:985–9.

IMAGES IN CARDIOLOGY

doi: 10.1136/hrt.2006.087551

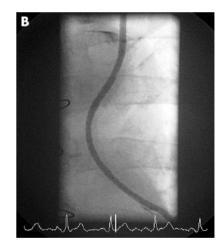
Successful stenting of stenotic lesion and spontaneous dissection of left internal mammary artery graft

75-year-old man was admitted with sudden onset central chest pain, which was provoked by lifting a heavy bookcase. He had been asymptomatic since coronary artery bypass grafting (CABG) eight years previously. This included left internal mammary artery (LIMA) graft to his left anterior descending artery (LAD) and saphenous vain grafts to the obtuse marginal artery (OM) and right coronary artery (RCA). His cardiac risk factors were type 2 diabetes mellitus and a family history of premature coronary disease. Clinical examination was unremarkable and the ECG showed T wave inversion in V1-V3. Troponin T was elevated at 2.8 u/l (normal < 0.01 u/l). Coronary angiography showed occlusive native triple vessel disease. Both vein grafts to the OM and RCA were widely patent. The LIMA graft contained a severe irregular stenosis in its proximal portion from which a long dissection flap extended distally to a surgical clip (panel A). Left ventricular function was mildly impaired with anterior hypokinesia. Percutaneous intervention to the LIMA graft was advised and the procedure was undertaken from the left radial artery. Using a Judkins right 4 guide with a BMW universal wire the proximal lesion was pre-dilated. Both the



lesion and dissection flap were stented using multiple Cypher drug eluting stents with an excellent angiographic result (panel B). He remained well at three months follow-up.

LIMA grafts have an excellent record of success and long-term patency. The most common site for stenosis is at the distal anastomosis. Lesions occur less frequently at the ostium or in the body of the graft. Lesions in the proximal vessel appearing soon after surgery may be caused by the kinking of the LIMA during surgical mobilisation or occasionally a surgical clip. Spontaneous LIMA graft



dissection is very rare and our patient did not have any predisposing factors such as connective tissue disorders, vasculitis or arterial hypertension. However, spontaneous coronary artery dissection has been reported in patients after strenuous exercise and lifting a heavy bookcase may have contributed to his spontaneous dissection of the LIMA graft.

> V Suresh, S Evans sureshpriya2000@yahoo.com