

important influence. The lower likelihood of women receiving anticoagulants is of particular concern.

Given the considerable variations in treatment of seemingly similar patients and the potentially serious consequences of over-treatment or under-treatment, further studies surveying doctors' reasons for prescribing or not prescribing warfarin in specific cases may be of value in understanding what other factors are important here. The factors that influence whether patients are willing to be treated with warfarin also need to be considered.

ACKNOWLEDGEMENTS

We acknowledge the technical assistance of Mr Steve Caine of CompuFile Ltd in handling the data and the general practitioners who provided the data.

Authors' affiliations

S DeWilde, I M Carey, D G Cook, Division of Community Health Sciences, St George's, University of London, London, UK
C Emmas, AstraZeneca UK Ltd, Luton, Bedfordshire, UK
N Richards, CompuFile Ltd, Woking, Surrey, UK

This study was funded by a grant from AstraZeneca. IC was also funded by a grant from the Wellcome Trust. SDeW was funded by the BUPA foundation.

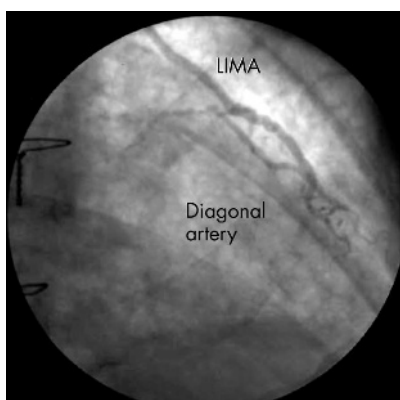
Competing interests: AstraZeneca funded this study and have interests in stroke prophylaxis. NR is a director of a company providing DIN-LINK data for commercial purposes.

REFERENCES

- 1 Anon. Stroke prevention in atrial fibrillation study: final results [see comment]. *Circulation* 1991;**84**:527-39.
- 2 Connolly SJ, Laupacis A, Gent M, et al. Canadian atrial fibrillation anticoagulation (CAFA) study. *J Am Coll Cardiol* 1991;**18**:349-55.
- 3 Petersen P, Boysen G, Godfredsen J, et al. Placebo-controlled, randomised trial of warfarin and aspirin for prevention of thromboembolic complications in chronic atrial fibrillation. The Copenhagen AFASAK study. *Lancet*, 1989;*i*, 175-9.
- 4 Majeed A, Moser K, Carroll K. Trends in the prevalence and management of atrial fibrillation in general practice in England and Wales, 1994-1998: analysis of data from the general practice research database. *Heart* 2001;**86**:284-8.
- 5 Fuster V, Ryden LE, Asinger RW, et al. ACC/AHA/ESC guidelines for the management of patients with atrial fibrillation: executive summary. A Report of the American College of Cardiology/American Heart Association task force on practice guidelines and the European Society of Cardiology committee for practice guidelines and policy conferences (committee to develop guidelines for the management of patients with atrial fibrillation): developed in collaboration with the North American Society of Pacing and Electrophysiology. *J Am Coll Cardiol* 2001;**38**:1231-66.
- 6 Gage BF, Waterman AD, Shannon W, et al. Validation of clinical classification schemes for predicting stroke: results from the national registry of atrial fibrillation. *JAMA* 2001;**285**:2864-70.
- 7 Bungard TJ, Ghali WA, Teo KK, et al. Why do patients with atrial fibrillation not receive warfarin? *Arch Intern Med* 2000;**160**:41-6.
- 8 Bellelli G, Bianchetti A, Trabucchi M. Let's strip the king: eligibility not safety is the problem of anticoagulation for stroke prevention in elderly patients with atrial fibrillation [letter]. *Arch Intern Med* 2002;**162**:1067.
- 9 Bellelli G, Rozzini R, Barbisoni P, et al. Geriatric assessment and anticoagulation in elderly patients with chronic atrial fibrillation. *Arch Intern Med* 2000;**160**:2402-3.
- 10 Howitt A, Armstrong D. Implementing evidence based medicine in general practice: audit and qualitative study of antithrombotic treatment for atrial fibrillation. *BMJ* 1999;**318**:1324-7.
- 11 Lipman T, Murtagh MJ, Thomson R. How research-conscious GPs make decisions about anticoagulation in patients with atrial fibrillation: a qualitative study. *Fam Pract* 2004;**21**:290-8.
- 12 Carey IM, Cook DG, De Wilde S, et al. Developing a large electronic primary care database (Doctors' Independent Network) for research. *Int J Med Inform* 2004;**73**:443-53.
- 13 Carey IM, Cook DG, De Wilde S, et al. Implications of the problem orientated medical record (POMR) for research using electronic GP databases: a comparison of the Doctors Independent Network Database (DIN) and the General Practice Research Database (GPRD). *BMC Fam Pract* 2003;**4**:14.
- 14 DeWilde S, Carey IM, Bremner SA, et al. Evolution of statin prescribing 1994-2001: a case of agism but not of sexism? *Heart* 2003;**89**:417-21.
- 15 Anon. ACORN user guide. London: CACI, 2004, <http://www.caci.co.uk/pdfs/Acorn%20Guide.pdf> (accessed 15 Dec 2005).
- 16 Blackshear JL, Safford RE. AFFIRM and RACE trials: implications for the management of atrial fibrillation. *Card Electrophysiol Rev* 2003;**7**:366-9.
- 17 Anon. PRODIGY guidance: atrial fibrillation. <http://www.prodigy.nhs.uk/guidance.asp?gt=atrial%20fibrillation> (accessed 15 Dec 2005).
- 18 Sudlow M, Thomson R, Thwaites B, et al. Prevalence of atrial fibrillation and eligibility for anticoagulants in the community. *Lancet* 1998;**352**:1167-71.
- 19 Ruigomez A, Johansson S, Wallander MA, et al. Incidence of chronic atrial fibrillation in general practice and its treatment pattern. *J Clin Epidemiol* 2002;**55**:358-63.
- 20 Friberg J, Scharling H, Gadsboll N, et al. Sex-specific increase in the prevalence of atrial fibrillation (the Copenhagen city heart study). *Am J Cardiol* 2003;**92**:1419-23.
- 21 Wolf PA, Benjamin EJ, Belanger AJ, et al. Secular trends in the prevalence of atrial fibrillation: the Framingham study. *Am Heart J* 1996;**131**:790-5.
- 22 Hippisley-Cox J, Pringle M, Crown N, et al. Sex inequalities in ischaemic heart disease in general practice: cross sectional survey. *BMJ* 2001;**322**:832-4.
- 23 Benjamin EJ, Wolf PA, D'Agostino RB, et al. Impact of atrial fibrillation on the risk of death: the Framingham heart study. *Circulation* 1998;**98**:946-52.
- 24 Stewart S, Hart CL, Hole DJ, et al. A population-based study of the long-term risks associated with atrial fibrillation: 20-year follow-up of the Renfrew/Paisley study. *Am J Med* 2002;**113**:359-64.
- 25 Shah S, Cook DG. Inequalities in the treatment and control of hypertension: age, social isolation and lifestyle are more important than economic circumstances. *J Hypertens* 2001;**19**:1333-40.
- 26 Reid FDA, Cook DG, Whincup PH. Use of statins in the secondary prevention of CHD: is treatment equitable? *Heart* 2002;**88**:15-9.
- 27 Hollowell J. The General Practice Research Database: quality of morbidity data. *Popul Trends*, 1997;Spring, 36-40.
- 28 Bradley N, Watkins S. Survey of equipment in general practice. *BMJ* 1989;**299**:435-6.

IMAGES IN CARDIOLOGY

Outcome of Vineberg's operation after 31 years



In 1945 Vineberg introduced surgical revascularisation utilising left internal mammary artery (LIMA) implantation into the myocardium. In 2003 a 90-year-old man was admitted with third degree atrioventricular block. A pacemaker was implanted. He had undergone Vineberg's procedure in 1972, but since then he had not received any cardiovascular drugs such as statins, angiotensin converting enzyme inhibitors, antiplatelet agents, or β blockers. He suffered from angina pectoris (Canadian Cardiovascular Society grade II), and his ejection fraction was 35%. The right coronary artery was normal, but the native left coronary artery (LAD) was occluded. However, the LIMA was patent with good filling of the diagonal artery and the LAD partially (panel).

doi: 10.1136/hrt.2005.077594

V Rozsival
vladimirrozsival@kardio-troll.cz