

**CARDIOVASCULAR DISEASE IN THE ELDERLY – 1**

Sir,

I found the paper 'Cardiovascular disease in the elderly' an excellent resume of the main topics of cardiology in the elderly. I was, however, surprised by the absence of any discussion related to cardiac resynchronisation therapy (CRT) in the section on pacemakers in the elderly.

The introduction of this treatment modality is a major development in treatment of congestive heart failure (CHF) in the elderly after an era of stagnation of medical antifailure therapy. It is now possible to reverse the asynchrony between the two ventricles which is an important patho-electrophysiological change in advanced CHF in the elderly, with catastrophic consequences. Atrioventricular pacing has been shown to improve the cardiac index, reduce systemic vascular biventricular resistance and reduce the pulmonary capillary wedge pressure. The quality of life as reflected by the New York Heart Association (NYHA) class is also thus improved.

The early results of the multi-centre clinical trials in pacing and heart failure are increasing physicians' confidence that CRT is changing the future history of CHF in the elderly.

In PATH-CHF European biventricular pacing trial, the Multicentre In sync Randomised Clinical Evaluation (MIRACLE) study and the Multisite Stimulation In Cardiomyopathies (MUSTIC) study all prove that CRT improves quality of life in the respective patient groups studied.

It is important that such core issues as CRT are not omitted in reviews of CHF in the elderly.

**AA ALABDULGADER**

**REFERENCE**

- Langridge CR. Cardiovascular disease in the elderly. *J R Coll Physicians Edinb* 2002; **32(4)**:281–90.

**CARDIOVASCULAR DISEASE IN THE ELDERLY – 2**

Sir,

The relevance of hypertension to heart disease, highlighted by the recent symposium,<sup>1</sup> came into sharper focus with the publication of the comparison of rhythm control (principally utilising either amiodarone or sotalol) vs rate control (with concurrent anticoagulation), in a cohort of patients with atrial fibrillation (AF) including 23% with heart failure.<sup>2</sup> In that study, the latter emerged as the strategy conferring survival advantage, especially in patients aged over 65.<sup>2</sup> Potential problems with that strategy highlight the need for a more proactive approach to the prevention of AF itself, and this includes greater vigilance in the recognition and management of hypertension, given the fact that, in the study, it emerged as the single most common risk factor for AF, its presence

being documented in 50.8% of cases.<sup>2</sup> In a larger study, comprising 17,974 adults with diagnosed AF, hypertension was documented in as many as 49.3%, again being the single most common risk factor.<sup>3</sup> Coronary heart disease was identified in 26% and in 34.6% of cases respectively,<sup>2,3</sup> hypertension being an acknowledged risk factor for this disorder as well.<sup>4</sup>

The problem with the exclusive use of rate control (with concurrent anticoagulation) is that of management of haemorrhagic risk involving either the upper gastrointestinal tract or the cranial cavity, in the context of our healthcare system. Surgeons vary enormously in their willingness to operate on elderly patients with either of these complications due to their perception of the degree of procedure-related mortality and morbidity, especially in patients with significant co-morbidity. In particular, the recent national trend (based on retrospective case-control study, i.e. level III evidence),<sup>5</sup> is for an age-related reduction in the operative rate for subdural haematoma,<sup>6</sup> and this is bad news for elderly AF patients managed with rate control.

What we now need is an individualised management strategy for AF, taking into account co-morbidity as well as the outcomes of audit of the degree and quality of monitoring of anticoagulant therapy vs monitoring of rhythm control, the latter preferably utilising a minimally pro-arrhythmic drug such as amiodarone. For the former one should monitor attainment of target INRs as well as the occurrence and management of haemorrhagic side-effects. For the latter we should monitor attainment, as well as retention of sinus rhythm and the occurrence and management of drug side-effects. For amiodarone, this would entail six-monthly ECGs (ideally including 24-hr Holter monitoring), liver function and thyroid function tests, and 12-monthly chest X-rays, the latter to detect pulmonary fibrosis. This is the protocol I have implemented in 120 patients who are on long-term amiodarone (100–200 mg/d) following successful conversion to sinus rhythm. The way forward would be to audit the success of this monitoring programme, and to compare the rate of drug side-effects with the side-effects of warfarin in age- and sex-matched controls attending the anticoagulant clinic. This is one of the ways in which clinicians would make informed choices about rate control vs rhythm control, especially in patients with significant co-morbidity. Co-morbidity other than heart failure did not, in fact, feature prominently in the AFFIRM study,<sup>2</sup> thereby limiting the applicability of its conclusions.

**OMP JOLOBE**

**REFERENCES**

- Potter J. Diagnosis of hypertension in older patients. In: Langridge CR. Cardiovascular disease in the elderly. *J R Coll Physicians Edinb* 2002; **32(4)**:281–90.
- The atrial fibrillation follow-up investigation of rate

control and rhythm management (AFFIRM) investigators. A comparison of rate control and rhythm control in patients with atrial fibrillation. *N Engl J Med* 2002; **347**:1825–33.

- 3 Go AS, Hylek EM, Phillips KA et al. Prevalence of diagnosed atrial fibrillation in adults. *JAMA* 2001; **285**:2370–5.
- 4 Kannel WB, Dannenberg AL, Abbott RD. Unrecognised myocardial infarction and hypertension: The Framingham Study. *Am Heart J* 1985; **109**:581–5.
- 5 Jamjoom A, Nelson R, Stranjalis G et al. Outcome following surgical evacuation of traumatic intracranial haematomas in the elderly. *Br J Neurosurg* 1992; **6**:27–32.
- 6 Munro PT, Smith RD, Parke TRJ. Effect of patients' age on management of acute intracranial haematoma: prospective national study. *BMJ* 2002; **325**:1001–3.

## ARE CHEST RADIOGRAPHS ALWAYS WHAT THEY SEEM?

Sir,

I was greatly interested in Professor Dargie's comments reported in *The Journal* on the difficulties of diagnosing heart failure in the elderly.<sup>1</sup> However, the impression was given, doubtless unintentional, that a normal chest radiograph would exclude a pulmonary cause for breathlessness. COPD would be the commonest respiratory cause in this age group, but even in association with emphysema, Armstrong et al.<sup>2</sup> consider that the chest film is normal in 50% of cases of mild to moderate disease.

A simple test of expiratory flow rate would be of more value in this context, bearing in mind that COPD is frequent in association with heart disease as they share a common aetiology (smoking).

Although fibrosing alveolitis is much less common than COPD, it is particularly liable to confusion with heart failure because of the acuseptory findings, and here again Webb et al.<sup>3</sup> stress that severe disease and symptoms can exist with a normal chest radiograph.

In the course of the same symposium speaking of dizziness Davies<sup>4</sup> comments that the final diagnosis may depend on the type of specialist clinic to which the patient is referred. A similar tendency may occur in breathless patients, which is worrying considering the decline of the general physician. One hesitates to suggest yet another type of symptom-led clinic, staffed by both cardiac and pulmonary physicians!

GC FERGUSON

## REFERENCES

- 1 Langridge CR. Cardiovascular disease in the elderly. *J R Coll Physicians Edinb* 2002; **32**(4):282.
- 2 Armstrong P, Wilson AE, Dee P et al. *Imaging of diseases of the chest*. 3rd ed. London: Mosby; 2000.
- 3 Webb WR, Muller NL, Naidich D. High resolution CT of the lung. 2nd ed. Philadelphia: Lippincott-Raven; 1996.
- 4 Langridge CR. Cardiovascular disease in the elderly. *J R Coll Physicians Edinb* 2002; **32**(4):283.

## CARDIOPULMONARY RESUSCITATION FOR PEOPLE WHO ARE TERMINALLY ILL

Sir,

In the paper prepared by the National Council for Hospice and Specialist Palliative Care Services and the Association for Palliative Medicine of Great Britain and Ireland,<sup>1</sup> it is reassuring to read the statement that 'no doctor can be required to deliver a treatment which he or she believes is not clinically justifiable'. However, as mentioned in the reference they quote,<sup>2</sup> a controversial situation may arise when the doctor (or even the whole care 'team') states that cardiopulmonary resuscitation (CPR) is 'futile', yet the patient concerned (who may also be supported by the relatives) still wants to give CPR a go. This could occur even after a discussion was aimed at securing an understanding and acceptance of the clinical judgement that 'CPR will not effectively restart the heart and breathing or that it cannot provide any overall benefit'.<sup>2</sup> The document suggested that 'if patients still ask that no "do not attempt resuscitation" or DNAR order be made, this should be respected'.<sup>2</sup>

We are also reassured that 'there is no ethical obligation to discuss CPR with those palliative care patients, for whom such treatment, following assessment, is judged to be futile'.<sup>1</sup> However, because the terms 'futility', 'quality of life', and 'best interests' can sound paternalistic and dismissive (at least to some patients), and may not be clearly defined (even to many healthcare professionals),<sup>3</sup> the British Medical Association has suggested that what is important is whether a treatment, e.g. CPR, can provide an overall benefit to the patient. The more familiar 'benefit and burden' model is therefore recommended in an ethical decision-making process.<sup>3</sup> In special circumstances, for example, where a terminally ill patient wants to live long enough to see an estranged family member – information which will only emerge from discussion with the patient or other close family members – a treatment such as CPR which carries 'only a very small chance of success or benefit' may arguably represent a significant social or psychological benefit (to the patient) to justify the burdens of a CPR even if 'judged to be futile'.<sup>4,5</sup>

JKT NGEH AND VKL TOH

## REFERENCES

- 1 National Council for Hospice and Specialist Palliative Care Services and the Association for Palliative Medicine. Ethical decision making in palliative care: cardiopulmonary resuscitation for people who are terminally ill. *J R Coll Physicians Edinb* 2002; **32**(4):280.
- 2 British Medical Association, Resuscitation Council (UK), Royal College of Nursing. Decisions Relating to Cardiopulmonary Resuscitation: a joint statement from the British Medical Association, the Resuscitation Council (UK) and the Royal College of Nursing. *J Med Ethics* 2001; **27**:310–16.
- 3 Romano-Critchley G, Sommerville A. Professional guidelines on decisions relating to cardiopulmonary

resuscitation: introduction. *J Med Ethics* 2001; **27**:308–9.

- 4 Watt H. Decisions relating to cardiopulmonary resuscitation. Commentary 3: degrading lives? *J Med Ethics* 2001; **27**:321–3.
- 5 Luttrell S. Decisions relating to cardiopulmonary resuscitation. Commentary 2: some concerns. *J Med Ethics* 2001; **27**:319–20.

#### FROM OMAHA TO THE SCHELDT

Sir,

I was saddened by your review, in a recent issue of the College's journal, of John Forfar's book *From Omaha to the Scheldt*.<sup>1</sup>

I have no objections to your observations and comments – each reviewer to his own – but regret your omissions.

It would have been appropriate to acknowledge that the College's *Proceedings* in 1994, 1995 and 1998 had published the author's earlier accounts of the Royal Marine Commandos' experience of warfare; and also to the facts that John Forfar is a senior Fellow of the College and a former Professor of Child Health at the University of Edinburgh.

To identify this author only as 'one of the young medical officers attached to the unit' (in fact, the only one) is rather ungenerous.

JD HALDANE

#### REFERENCE

- 1 Busuttill A. Book review: *From Omaha to the Scheldt*. *J R Coll Physicians Edinb* 2002; **32**(4):311–12.

#### BREAST CANCER SCREENING

Sir,

I welcome review articles to help non-specialists understand medical issues covered by the media. The introduction to the Behind the Headlines section states that these 'will become an invaluable source of independent and authoritative advice'. However, many of your readers will feel betrayed if you commission reviews from authors who presents data from only one side of a controversy, for they will be mislabelled and misleading. The article on breast cancer screening is a case in point.<sup>1</sup>

Miss Anderson writes that the IARC group (international experts who run breast screening programmes), 'concluded that the reduction in mortality from breast screening in women who participate in screening programmes is around 35%'.<sup>1</sup> What the IARC report actually said was as follows:

Given the evidence about reduction of mortality from breast cancer in randomised trials of breast cancer screening, screening programmes for women aged 50–69 at a 2- or 3-year interval are expected to be cost effective in high-incidence countries with well-

organised programmes. National reduction in breast cancer mortality may be of the order of 10–20%.<sup>2</sup>

Miss Anderson writes, 'In a UK context, this means that two women in every 1,000 screened would be saved over the next 10 years'.<sup>1</sup> However, a review in *Annals of Internal Medicine* concludes, 'The number needed to screen to prevent one death from breast cancer after 14 years of observation is 1224 (95% CI 665 to 2564)'.<sup>3</sup>

Miss Anderson claims that detection of cancers at an early stage of their life history allows 'less radical treatment with more breast conservation'<sup>1</sup> – but some experts in the field say this is not true.

Even more striking is Miss Anderson's silence about the disadvantages of screening. She mentions that screening 'has significant financial implications'<sup>1</sup> – in fact the cost is more than £50 million per annum. However, she fails to point out the opportunity costs and workload placed on hospital radiology departments, and she is conspicuously silent about the anxiety caused to the 53 in 1,000 women screened who are recalled for re-examination, three of whom will have biopsies that are benign. Nor does she mention that an increasing proportion of the cancers detected by screening are DCIS – in other words they may never have caused illness, except perhaps for the trauma of that diagnosis. Quite apart from the strain and anxiety, a diagnosis of breast cancer, however non-invasive, may be hugely disruptive to family, holiday and work plans, and might be a real handicap to any woman seeking life insurance, a mortgage or even a job.

Miss Anderson is director of a breast screening service, and I do not doubt that the picture she paints is one she believes in, but I do not accept that her advice lives up to *The Journal's* claims of being independent and authoritative. I therefore ask you, when commissioning reviews on controversial subjects, to ensure that you choose a reviewer who is unbiased – or commission two or more writers to explain the different perspectives.

J GARROW, CHAIRMAN OF HEALTHWATCH

#### REFERENCES

- 1 Anderson EDC. Screening for Breast Cancer. *J R Coll Physicians Edinb* 2003; **33**(1):10–11.
- 2 World Health Organisation International Agency for Research in Cancer. Editors: Vainio H, Bianchini F. *IARC Handbooks of Cancer Prevention. Volume 7: Breast Cancer Screening*. Lyon: IARC Press; 2002; 177.
- 3 Humphrey LL, Helfand M, Chan B K S et al. Breast Cancer Screening: A Summary of the Evidence for the US Preventive Services Task Force. *Ann Intern Med* 2002; **137**:347–60.

## REPLY

Sir,

Thank you for the opportunity to respond to Professor Garrow. I would like to bring his attention to another part of the IARC report 'Estimates of efficacy (of breast screening) should be based on trials, after adjustments for non-participation and contamination. By making such adjustments, the working group estimate that attendance for screening would reduce mortality from breast cancer by about 35%.<sup>1</sup>

The figures 10–20%,<sup>2</sup> relate to the potential national reduction in mortality from breast cancer in all women irrespective of whether they participate in screening. In England and Wales the mortality reduction from breast cancer between 1990 and 1998 in women aged 55 to 69 was 21.3%.<sup>3</sup> The direct absolute effect of screening was estimated as 6□.4% (range 5.4–11.8%). The remaining 14.9% being due to other improvements in systemic therapy and earlier presentation outside the screening programme.

Information given on lives saved was taken from part of the IARC evidence given by Valerie Beral, Professor in the Cancer Research UK Department of Epidemiology, Cancer Intelligence Unit, Radcliffe Infirmary, Oxford and member of IARC expert working group 'out of the every 500 women screened, one life will be saved' – I believe that this converts to two women from every 1,000 screened.

Conclusive evidence now exists that the breast conservation rate is much higher in women whose cancers are detected through breast screening than those who present with palpable disease. Of the 7,911 invasive breast cancers detected by the UK NHSBSP in 2001/02, 5,575 (70%) underwent conservation surgery, 2,241 (28%) had a mastectomy and 59 (1%) had no surgery.<sup>4</sup> Comparative data for the same time period is available for women presenting with symptomatic disease from 85 UK breast units. Only 72.4% underwent surgery. Of these 7,546 women, only 3,691 (48.9%) were suitable for breast conservation, while 3,664 (48.5%) required mastectomy. In the remaining 191, the surgical treatment was not known.

Concern was raised in relation to the anxiety induced by an invitation to review. This is real but self-limiting and an integral part of any screening programme. Despite previous experience of recall, women still choose to attend for further screening and in this population subsequent use of screening mammography is not decreased and in fact is modestly increased.<sup>5</sup> The proportions of women recalled for further investigation are correctly given in the review.

The current benign biopsy rate is 1.3/1,000 women screened for 2001/02,<sup>4</sup> not 3/1,000 as quoted by Professor Garrow and has been at this level for several years. The importance of high-quality assurance in

reducing these unintended adverse effects was emphasised.

The debate over the relevance of DCIS was noted in the original article. Twenty one per cent of cancers diagnosed under the NBSF are DCIS, 48% of which are high grade.<sup>4</sup> I refer to the IARC report: 'Although the data on the natural history of ductal carcinoma in situ are limited, it is likely that high grade lesions are associated with a significantly higher risk for development of invasive carcinoma than low grade lesions. High grade lesions appear to be more biologically aggressive, with a higher rate of recurrence after breast-conservation surgery.'<sup>6</sup>

The Breast Screening budget for 2001/2 was £52 million but does not include funding for Scotland and Northern Ireland. It does, however, include funding up to and including the point of diagnosis. The cost, however, to the individual woman is £30 per woman invited, £40 per woman screened (BSP Annual Review 2002) or 3,000–8,000 euros per life year gained.<sup>2</sup>

I quote the opinion of the expert IARC panel: 'Given the evidence about reduction of mortality from breast cancer in randomised trials of breast screening, screening programmes for women aged 50–69 at 2 or 3 year interval, are expected to be cost-effective in high-incidence countries with well organised programmes.'<sup>2</sup> For the individual woman there may be costs and I repeat it is for each woman to decide whether screening is worthwhile for them.

**EDC ANDERSON**

## REFERENCES

- 1 World Health Organisation International Agency for Research in Cancer. Editors: Vainio H, Bianchini F. *IARC Handbooks of Cancer Prevention. Volume 7: Breast Cancer Screening*. Lyon: IARC Press; 2002; 174.
- 2 *Op. cit. ref 1*, 177.
- 3 Blanks RG, Moss SM, McGahan CE *et al.* Effect of NHS breast screening programme on mortality from breast cancer in England and Wales, 1990–8: comparison of observed with predicted mortality. *BMJ* 2000; **321**:665–9.
- 4 NHS Breast Screening Programme & Association of Breast Surgery at BASO. An audit of screen detected breast cancers for the year of screening April 2001 to March 2002. Presented at the Association of Breast Surgery at BASO Meeting 2 April 2003, Birmingham.
- 5 Burman MI, Taplin SH, Herta DF *et al.* Effect of false-positive mammograms on interval breast screening in a health maintenance organization. *Ann Intern Med* 1999; **131**:1–6.
- 6 *Op. cit. ref 1*, 171.

## NOTE FROM THE CME EDITOR

Professor Garrow questions the independence of Miss Anderson and whether papers such as hers can be considered 'authoritative'. From an editorial point of view we only commission papers from acknowledged leaders in a particular field and all papers undergo peer review, therefore I think we can reasonably claim to be



'authoritative'. We would never, of course, claim to be 'definitive'.

We thank Professor Garrow for his comments and Miss Anderson for her response.

#### THE DECLINE OF GERMAN MEDICINE, 1933–45

Sir,

The article in the History section of last quarter's issue of *The Journal* entitled 'The decline of German medicine, 1933–45' raised many important issues about the influence of an abhorrent political regime on the principles and practice of medicine in Germany. The author makes a valiant attempt to cover, if only in brief, many of the heinous crimes committed in the name of medicine in Germany during the Hitlerite period. Unfortunately Dr Silver, in attempting to cover such a vast subject, makes serious and potentially offensive omissions and errors of emphasis. I will mention but two major issues. First, Nazi medicine, as an extension of overall Nazi policy and Nazification of invaded countries, left medical institutions and patient care in ruins throughout Germany and continental Europe following the Second World War. Nazi medicine as a weapon of invasion led to the exile of medical schools including, most significantly for Edinburgh, the Polish School of Medicine. Second, Dr Silver entitles the penultimate section of his article 'Beneficial aspects of Nazi medicine'. The use of the word 'beneficial' is simply inappropriate and offensive because it implies that good could come from the brutal and inhumane policies of Nazi medicine, which Dr Silver acknowledges, was responsible for the cruel and torturous deaths of millions of individuals in Germany and throughout Europe between 1933 and 1945. The suggestion that there were any beneficial effects from the millions of deaths and injuries caused by Nazi medicine would be akin to a nonsensical and 'revisionist' suggestion that Harold Shipman contributed in a positive way to a physician's understanding of the toxicity of opiates!

MC POZNANSKY

#### REFERENCE

- 1 Silver J. The Decline of German Medicine, 1933–45. *J R Coll Physicians Edinb* 2003; **33**(1):54–66.

#### REPLY

Sir,

I am glad that Dr Poznansky acknowledges that I have made an attempt to discuss many of the heinous crimes committed in the name of medicine in Germany during the Hitlerite period. My article was intended to remind people about what happened rather than it being pushed to the back to people's minds.

He says I have made 'serious and potentially offensive omissions and errors of emphasis'. As he admits, it is a

huge subject and many books have been written on the subject covering thousands of pages (see my 69 references) and I was seeking to remind people of a very dark chapter in the history of humankind. My article was an attempt to be balanced and clearly not every aspect could be covered.

One of the omissions that Dr Poznansky criticises is: 'Nazi medicine as an extension of overall nazi policy and Nazification of invaded countries left medical institutions and patient care in ruins throughout Germany and continental Europe following the Second World War.' I made just these points in the final paragraph, long-term effects of Nazi medicine, that distinguished research work was viewed with suspicion, that a generation of doctors emerged who were a professional liability, that doctors no longer travelled to Germany for further training and doctors today are ashamed or unaware of what went on in the past and that administrators in responsible positions obstructed holocaust research.

With regard to the exile of medical schools, particularly Edinburgh, I was well aware of this but cannot see how the establishment of a medical school in Edinburgh, which has benefited many distinguished graduates, falls within the title 'Decline of German Medicine'; it is not germane to the subject.

With regard to the use of the word 'beneficial', which he finds offensive, I was endeavouring to give a balanced account of what happened in Nazi Germany. I discussed the very point that he makes: 'Perverse as this may sound, there were also futile, creative faces of Nazism. By its nature Nazism was dynamic, forward-looking and worked against the recognised establishment and conventional thought. Public health initiatives were pursued not just in spite of Nazism, but also in consequences of Nazism.'

Dr Poznansky says 'The suggestion that there were any beneficial aspects of millions of deaths and injuries caused by Nazi medicine . . .' I did not suggest that there were any beneficial effects from the deaths and injuries caused by Nazi medicine. This is a misquotation. The beneficial effects were on cancer research, which did not involve extermination; on public health where detailed post mortems were carried out; on occupational health, diet, exercise and advertising – none of which involved the extermination of millions of people. In fact I drew attention to the very point that he is making under 'Exclusions' that these health regulations did not apply to slaves and foreign workers who died from exhaustion and malnutrition before carcinoma became effective.

I would suggest that before accusing me of carrying out offensive omissions and using errors of emphasis, he read the article and the points I have made carefully as they are dealt with.

JR SILVER