Letters to the Editor

Heart failure: the rules of halves

Sirs,

The fact that cardiologists are better for the treatment of patients with heart failure than general physicians is again well substantiated by Davie and McMurray in their recent article. Their audit confirmed once again that patients who are looked after by cardiologists are more likely to receive an angiotensin-converting enzyme (ACE) inhibitor, the benefits of which are indisputable, and are more likely to receive them in effective doses. Their report further confirmed the link between echocardiography and the likelihood of receiving an ACE inhibitor. When echocardiography is not readily available, not only is the uptake of ACE inhibitors low but many patients without systolic dysfunction may be treated inappropriately. This has led to the concept of the ‘rules of halves’ for heart failure: among patients currently receiving treatment for heart failure, up to half may have no evidence of cardiac dysfunction; of those patients who do have cardiac dysfunction, half or less have left ventricular systolic dysfunction; of those with left ventricular systolic dysfunction, less than half are receiving appropriate therapy.

The study reported by Kreiss and colleagues was an attempt to endorse that the ‘rules of halves’ are correct. Their report further confirmed the link between systolic dysfunction and the receipt of ACE inhibitors. And, as our study also showed, the success rate of an exclusively oral regimen has been shown to be of the order of 31%.

I have successfully cardioverted 16 out of 54 patients with amiodarone in the past 10 years, aged between 73 and 91 years (nine women), who illustrate the point that AF, documented on at least two occasions, more than 48 hours before initiation of arrhythmic therapy, can be converted to sinus rhythm with amiodarone, with no relapse on follow-up of up to 5 years. Prior to amiodarone, the duration of AF was 4–35 days in eight patients, 8–22 weeks in five patients, one year each in two patients, and 3 years 4 months in the final patient. After receiving a standardised loading dose (most of which was administered on an outpatient basis) of amiodarone 600 mg/day for 7 days, followed by 400 mg/day for 7 days, with a subsequent maintenance dose of 200 mg/day, cardioversion was documented by electrocardiography at variable times, ranging from <14 days (five cases) to periods of up to nine and a half months (11 cases), depending on when the patient could attend for follow-up. Subsequent to successful cardioversion, seven patients have remained in sinus rhythm during follow-up lasting 1–5 years, whilst in another nine, follow-up in sinus rhythm has been of <1 year duration. One case strikingly illustrates the risk/benefit profile of warfarin vs chemical cardioversion with amiodarone, even when the latter is commenced after 48 hours. This was a 74-year-old woman who commenced warfarin as well as amiodarone after a transient ischaemic attack occurring after five and a half months of established AF. Whist on warfarin, she experienced a near-fatal anaphylactic reaction to a 500 µg dose of intravenous vitamin K (Konakion Roche), administered for correction of a prolonged International Normalised Ratio (INR). As a result of this mishap, instead of using the intravenous route, a subsequent INR of 9.5 was corrected to 1.7, within 24 hours, through the use of a 5 mg dose of oral vitamin K. After 5 months treatment with 200 mg/day of amiodarone, this patient has recently reverted to sinus rhythm, and will shortly be stopping warfarin, thereby avoiding all the risks of long-term anticoagulation.

This letter was shown to the authors who responded as follows:

Sirs,

The main aim of our study was to prospectively examine the efficacy and safety of intravenous amiodarone in recent onset atrial fibrillation (AF). The study did not include patients with AF of more than 48 hours duration, and thus, we have not tried to directly imply any message about the efficacy of amiodarone conversion in such patients. However, we agree with Dr Jolobe, that converting chronic AF with oral amiodarone is feasible, but should be administered after appropriate anticoagulation. Dr Jolobe’s success rate of about 30% conversion is in accordance with previous published data on treatment of AF with amiodarone. Moreover, as shown in our data, we achieved similar results, as continued oral amiodarone loading for one month was successful in 3/9 patients. However, it should be noted that intravenous amiodarone, but not oral loading, has an immediate effect on slowing the ventricular response rate, as we and others have shown. Thus, the indications and the risk/benefit ratio are different for intravenous vs oral amiodarone.

YTSHAK KREISS
YEHEZKEL SIDI
HANAN GUR

Department of Medicine C, The Chaim Sheba Medical Center, Tel Hashomer 52621, Israel

Amiodarone in atrial fibrillation

Sirs,

The study reported by Kreiss and co-workers is a major step in endorsing as good practice what junior doctors have been doing for sometime when faced with a heart failure patient in atrial fibrillation (AF), when the duty anaesthetist is unwilling to administer a general anaesthetic for electrical cardioversion. My only criticism is the implied message that the success rate of chemical cardioversion with amiodarone by the oral route, might be unacceptably low when attempted >48 hours after onset of AF. For such patients, the success rate of an exclusively oral regime has been shown to be of the order of 31%.

I have successfully cardioverted 16 out of 54 patients with amiodarone in the past 10 years, aged between 73 and 91 years (nine women), who illustrate the point that AF, documented on at least two occasions, more than 48 hours before initiation of arrhythmic therapy, can be converted to sinus rhythm with amiodarone, with no relapse on follow-up of up to 5 years. Prior to amiodarone, the duration of AF was 4–35 days in eight patients, 8–22 weeks in five patients, one year each in two patients, and 3 years 4 months in the final patient. After receiving a standardised loading dose (most of which was administered on an out-patient basis) of amiodarone 600 mg/day for 7 days, followed by 400 mg/day for 7 days, with a subsequent maintenance dose of 200 mg/day, cardioversion was documented by electrocardiography at variable times, ranging from <14 days (five cases) to periods of up to nine and a half months (11 cases), depending on when the patient could attend for follow-up. Subsequent to successful cardioversion, seven patients have remained in sinus rhythm during follow-up lasting 1–5 years, whilst in another nine, follow-up in sinus rhythm has been of <1 year duration. One case strikingly illustrates the risk/benefit profile of warfarin vs chemical cardioversion with amiodarone, even when the latter is commenced after 48 hours. This was a 74-year-old woman who commenced warfarin as well as amiodarone after a transient ischaemic attack occurring after five and a half months of established AF. Whist on warfarin, she experienced a near-fatal anaphylactic reaction to a 500 µg dose of intravenous vitamin K (Konakion Roche), administered for correction of a prolonged International Normalised Ratio (INR). As a result of this mishap, instead of using the intravenous route, a subsequent INR of 9.5 was corrected to 1.7, within 24 hours, through the use of a 5 mg dose of oral vitamin K. After 5 months treatment with 200 mg/day of amiodarone, this patient has recently reverted to sinus rhythm, and will shortly be stopping warfarin, thereby avoiding all the risks of long-term anticoagulation.

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YTSHAK KREISS
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7 Clederg JGF. Screening for left ventricular dysfunction and heart failure: should it be done and if so how? Dis Manag Health Outcomes 1997;1:169–84.

Accepted 26 May 1999


Accepted 14 June 1999

**Book reviews**

The reviewers have been asked to rate these books in terms of four items: readability, how up-to-date they are, accuracy and reliability, and value for money, using simple four-point scales. From their opinions, we have derived an overall ‘star’ rating: * = poor; ** = reasonable; *** = good; **** = excellent.


Pulse oximeters, like smoke alarms and carbon monoxide detectors, are late 20th century devices which many of us would feel naked working without. They monitor non-invasively and in real-time to warn of unseen changes in oxygenation and perfusion, as near-perfect end-organ observers. Their presence, outlined in this book, in various hostile environments or where sedation is practised, has been particularly welcomed by medical staff everywhere.

The author John Moyle, an engineer and anaesthetist/intensivist, is a gifted, concise writer. This second edition details clinical and physical matters with equal clarity and includes a new chapter on foetal oximetry, where trends in (already low) saturations correlate well with sampling as reasonable predictors of outcome or to advise on the timing of interventions.

His well-referenced text should be available to all new and existing users of these devices. Whilst sensitive to the rights of publishers, it would be wonderful if instrument manufacturers would bulk-buy and distribute this book with their products! A good buy nonetheless.

CHARLES W ALLISON
Consultant Anaesthetist, Tayside Teaching Hospitals Trust, Tayside, UK


This book provides a detailed description and assessment of all aspects of health services research. The first two sections describe how health and disease can be measured and the types of study designs available to test new interventions and technologies. Examples of topics included are disease-specific measurement scores, quality-of-life measures, the merits of both randomised and non-randomised trials as well as their ethical and social issues. The book continues by giving an overview of statistical approaches and how data should be presented and interpreted. Examples include the Bayesian approach and survival data. The final section discusses future developments including how to identify new technologies and their implementation. The research structure within the NHS is also described.

This is an excellent book which is clearly written and covers all the disciplines within the field. The principles outlined are complemented by many examples from clinical practice. The chapters are well illustrated with summary boxes and relevant diagrams.

Each chapter is written by a group of authors who are all leaders in their area. This book will be invaluable to those new to the field who wish to gain an overview as well as the more experienced worker wishing to gain more detailed information in a particular area. I am sure this book is going to become the definitive text in its field.

ANDREW HART
Consultant Physician, Norfolk and Norwich NHS Trust, Brunswick Road, Norwich NR1 3SR, UK

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**International Postgraduate Diary**

**Institute of Obstetrics & Gynaecology, Imperial College School of Medicine, London**

- 1 October 1999: Drugs in school
- 4 October 1999: The death of a child
- 6–8 October 1999: Medical problems facing obstetricians and physicians in pregnancy
- 11 October 1999: Women and children with HIV and AIDS
- 19 October 1999: Adolescent medicine—the teenage years
- 4 November 1999: Child protection
- 5 November 1999: Menopause, HRT and the general practice team
- 8 November 1999: Community child health—modern practice
- 9 November 1999: Children under stress
- 16 November 1999: The child with special needs
- 17/18 November 1999: Psychossexual medicine in practice
- 22–26 November 1999: Neonatal course for senior paediatricians

Details: The Symposium Office, Imperial College School of Medicine, Queen Charlotte’s & Chelsea Hospital, Goldhawk Road, London W6 0XG, UK. Tel +44 181 383 3904; fax +44 181 383 8553; email: symprop@ic.ac.uk

**University of Warwick Short Courses**

- 13–16 December 1999: Techniques and applications of molecular biology
  Details: Dr Charlotte Wet, Department of Biological Sciences, University of Warwick, Cotswold Court, CV4 7AL, UK. Tel +44 1203 528540; fax +44 1203 523701; e-mail: ca@ dna.bio.warwick.ac.uk

**17th World Congress on sarcoidosis and other granulomatous disorders 8–13 November 1999: Kumamoto, Japan

Details: Prof Masayuki Ando, Kumamoto University School of Medicine, 1-1-1 Honjo, Kumamoto 860, Japan. Tel +81 96 373 5150; fax +81 96 371 0582

World Congress of Interventional Cardiology 14–16 October 1999: Mumbai, India

Details: Prof Dr Lokha Pathak, Secretary General, World Congress of Interventional Cardiology, Santacruz (West), Mumbai 400 054, India. Tel +91 22 6490261; fax +91 22 6499464

International Institute for Continuing Medical Education 30 September–3 October 1999: Breast imaging update (Hilton Head, SC, USA)

Details: University of California, Office of Continuing Medical Education, UCSF Box 0742, LH-450, San Francisco, CA 94143-0742, USA. Tel +1 415 476 4521; fax +1 415 476 0318

Barrow Neurological Institute, Phoenix, AZ, USA

- 2–4 March 2000: 26th Annual symposium: Recent advances in neurosurgery

Details: Neuroscience Conference Coordinator, Barrow Neurological Institute, 350 West Thomas Road, Phoenix, AZ 85013, USA. Tel +1 602 406 3067; fax +1 602 406 4104; email: derlniks@barrowneuro.com

Falk Symposia 20/21 October 1999: Immunology and liver (Basel, Switzerland)

Details: Falk Foundation eV—Congress Division, Leinonenweg 5, PO Box 6529, D-79041 Freiburg, Germany. Tel +49 761 130340; fax +49 761 1303459; email: symposia@falkfoundation.de

University of California School of Medicine at San Francisco/University of Cincinnati College of Medicine 4–6 November 1999: Otolaryngology update 1999 (San Francisco, CA, USA)

Details: University of California, Office of Continuing Medical Education, UCSF Box 0742, LH-450, San Francisco, CA 94143-0742, USA. Tel +1 415 476 4521; fax +1 415 476 0318
Heart failure: the rules of halves

TSUNG O CHENG

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There is no clear correlation between clinical presentation and outcome though rapid onset with coma and focal deficit indicate a poorer prognosis. Patients should receive intravenous heparin guided by close monitoring of the PTT, provided there are no general contraindications. MRI combined with MR venogram because it is not only very sensitive but also non-invasive. Headache, papilloedema, focal deficits, seizures and impaired level of consciousness occur in one-third to three-quarters of patients. Hereditary prothrombotic disorders together with or without the use of oral contraceptives. Probably women of young and middle age, reflecting the frequency of specific causes such as pregnancy, puerperium and oral contraceptive use. Ildefonte. Amiodarone in atrial fibrillation (letter).

Answers to questions on p 10.
1. Chronic hepatitis B or C infection and liver cirrhosis.
2. Ill-defined upper abdominal pain, weight loss and non-specific malaise. There may be features of underlying cirrhosis.
3. Liver function tests, haemoglobin. Alpha-foetoprotein is helpful if markedly elevated. Ultrasound examination. Imaging by CT or MRI for diagnosis and for staging the tumour. Histological confirmation of all tumours is controversial.
4. Surgical resection or transplantation are the two main options but are suitable for less than 20% of patients with these tumours.
5. Transcatheter arterial chemoembolisation is increasingly used in clinical practice. Other options include intra-arterial or systemic chemotherapy, percutaneous ethanol injection, cryoablation, thermotherapy, proton or hormonal therapy, or a wide range of their combinations. The current lack of definitive data, however, limits the use of the treatments.

Answers to the questions on p 15.
1. Probably women of young and middle age, reflecting the frequency of specific causes such as pregnancy, puerperium and oral contraceptive use.
2. The extensive presence of collateral circulation explaining some of the pathophysiological differences between venous and arterial stroke.
3. Hereditary prothrombotic disorders together with or without the use of oral contraceptives.
4. Headache, papilloedema, focal deficits, seizures and impaired level of consciousness occur in one-third to three-quarters of patients.
5. MRI combined with MR venogram because it is not only very sensitive but also non-invasive.
6. Patients should receive intravenous heparin guided by close monitoring of the PTT, provided there are no general contraindications to its use.
7. There is no clear correlation between clinical presentation and outcome though rapid onset with coma and focal deficit indicate a poorer prognosis.

CORRECTION
Jolobe OMP. Amiodarone in atrial fibrillation (letter). Postgrad Med J 1999;75:703. The first sentence in the second paragraph should start “Out of 54 patients I have successfully cardioverted with amiodarone in the past 10 years, were 16 who illustrate the point that AF, documented on at least two occasions . . . “.