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A treatable cause of aborted sudden cardiac death Aditya Kapoor, Timothy A Wells, Daniel Wong and John P O'Shea

TO THE EDITOR: Awareness about atypical and malignant modes of presentation of a clinical condition can avoid catastrophic outcomes, assist in correct diagnosis in the appropriate clinical setting and, as typified by the following case, offer complete cure.

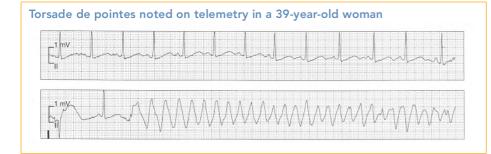
A 39-year-old woman presented with a 5year history of intermittent, recurrent brief syncopal episodes. During an episode at presentation, telemetry showed torsade de pointes with ventricular fibrillation (Box), and external defibrillation was required to restore sinus rhythm. Amiodarone infusion was initiated at a local hospital before the patient was referred to our institution for further investigation and management.

On presentation, her heart rate was 50 beats/min and her blood pressure was 170/95 mmHg. No other abnormalities were detected on examination. A resting electrocardiogram (ECG) showed prominent U waves, with a long QT interval (QTc of

540 ms). As the patient had mild hypokalaemia (serum potassium level, 3.1 mmol/L), mild hypocalcaemia (serum calcium level, 2.10 mmol/L) and a prolonged QT interval, the amiodarone infusion was discontinued, and supplementation with potassium and calcium was initiated. In view of the hypertension and hypokalaemia, primary aldosteronism was suspected.

Serum cortisol, 24-hour urinary cortisol and 24-hour urinary catecholamine levels were normal. The plasma aldosterone/renin ratio was markedly elevated (1920/1.2 = 1595; normal, <99). Failure of aldosterone suppression after acute saline loading was also noted. Computed tomography of the abdomen showed a right adrenal ovoid mass (1.9×1.2 cm). Adrenal vein sampling confirmed right lateralisation (right to left ratio, 40 : 1; aldosterone level in the right vein was 224000 pmol/L while that in the left vein was 5570 pmol/L).

Despite initial potassium supplementation, the hypokalaemia persisted and only improved after initiating diuretic therapy with amiloride. Two weeks later, laparoscopic right adrenalectomy was performed, and adrenocortical adenoma was confirmed



histologically. After surgery, plasma aldosterone and renin levels normalised to 106 pmol/L and 8.9 mU/L, respectively. Nine months later, the patient was normotensive (without treatment) and had a normal ECG with no further recurrence of arrhythmias.

This was a case of primary aldosteronism presenting as aborted sudden cardiac death and malignant syncope secondary to hypokalaemia-induced torsade de pointes. Most patients with primary aldosteronism are either asymptomatic or have symptoms related to hypertension or hypokalaemia (eg, polyuria, cramps, paraesthesia or muscle weakness); the diagnosis is often missed because of the non-specific clinical features. Primary aldosteronism presenting with cardiovascular collapse caused by hypokalaemic torsade de pointes and recurrent ventricular fibrillation is extremely rare, as is presentation as sudden cardiac death secondary to ventricular fibrillation.¹ A prolonged QT interval has been reported in cases of primary aldosteronism,² with values normalising after adrenalectomy.³

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- Abdo A, Bebb RA, Wilkins GE. Ventricular fibrillation: an extreme presentation of primary aldosteronism. Can J Cardiol 1999; 15: 347-348.
- 2 Maule S, Mulatero P, Milan A. QT interval in patients with primary aldosteronism and low renin hypertension. J Hypertens 2006; 24: 2459-2464.
- 3 Matsumura K, Fujii K, Kansui Y, et al. Prolongation of the QT interval in primary aldosteronism. *Clin Exp Pharmacol Physiol* 2005; 32: 66-69.

Childhood overweight and obesity by Socio-economic Indexes for Areas

Mu Li, Karen Byth and Creswell J Eastman

To THE EDITOR: Childhood overweight and obesity have become a major public health concern in Australia. Between July 2003 and December 2004, we conducted the Australian National Iodine Nutrition Study (NINS) among schoolchildren.¹ While visiting primary schools across Australia, we observed that many children were overweight or obese. The NINS data allowed us to estimate the prevalence of overweight and obesity among 8–10-year-old Australian schoolchildren, and to determine whether the prevalence was associated with socioeconomic background.

The study population comprised a onestage random-cluster sample from all Year 4 school classes in 92 government and nongovernment schools.1 Children were aged 8-10 years (mean, 9.3 years). Height and weight were measured by standard techniques and were used to calculate body mass index. Overweight and obesity were identified using international standard definitions.² Socioeconomic status was defined by the Index of Relative Socio-Economic Advantage/Disadvantage of the Census of Population and Housing's Socio-Economic Indexes for Areas (postal areas).³ This index is a continuum of advantage to disadvantage. A higher score indicates that an area has a relatively higher proportion of people with higher incomes or a skilled workforce.

The prevalence of overweight and obesity in 8–10-year-old schoolchildren was 18.5% and 6.5%, respectively. There was no significant sex difference in prevalence and no significant evidence of an association between socioeconomic status and overweight or obesity (Box).

The prevalence of overweight and obesity combined and of obesity alone was similar to previously reported prevalence,4,5 although the age range of the participants was more limited than in other studies. We minimised measurement error bias by using the same equipment throughout, in the same setting. Furthermore, most measurements were taken by the same person. We could not demonstrate an association between socioeconomic status and the prevalence of overweight and obesity combined, or of obesity alone. This suggests that childhood overweight and obesity is common to all Australian communities, irrespective of socioeconomic background.

Preventing overweight and obesity in children may reduce the risk of adult overweight and obesity and related diseases. Regular monitoring and surveillance of the situation is needed. Australia is one of the first countries in the world to develop a national strategy for overweight and obesity.⁶ However, the strategy needs to be communicated to the wider community and turned into action to combat this public health problem.

Acknowledgements: We thank all who contributed to the Australian National Iodine Nutrition Study.

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 Li M, Eastman CJ, Waite KV, et al. Are Australians iodine deficient? Results of the Australian National lodine Nutrition Study. *Med J Aust* 2006; 184: 165-169.

- 2 Cole TJ, Bellizzi MC, Flegal KM, Dietz WH. Establishing a standard definition for child overweight and obesity worldwide: international survey. *BMJ* 2000; 320: 1240-1243.
- 3 Australian Bureau of Statistics. Information paper. Census of Population and Housing. Socio-economic indexes for areas, Australia, 2001. Canberra: ABS, 2003. http://www.ausstats.abs.gov.au/ a usstats/free.nsf/0/AFF5E8542B58B94E-CA256DD5007A3DF8/\$File/20390_2001.pdf (accessed Jan 2007).
- 4 Booth ML, Wake M, Armstrong T, et al. The epidemiology of overweight and obesity among Australian children and adolescents, 1995-1997. Aust N Z J Public Health 2001; 25: 162-169.
- 5 Magarey AM, Daniels LA, Boulton TJC. Prevalence of overweight and obesity in Australian children and adolescents: reassessment of 1985 and 1995 data against new standard international definitions. *Med J Aust* 2001; 174: 561-564.
- 6 Baur LA. Obesity: definitely a growing concern [editorial]. Med J Aust 2001; 174: 553-554.

Increase in adult body weight in coronial autopsies: an impending crisis?

Roger W Byard and Maria Bellis

TO THE EDITOR: Obesity in adults presents significant issues for health care providers, including practical problems in transporting and accommodating large individuals, and in performing standard tests and investigations.¹ However, this issue has been little addressed in the mortuary setting, although a recent media report detailed the need for larger crematorium furnaces to accommodate oversized coffins, as well as larger graves for burials.²

We reviewed the body mass index (BMI) of individuals who had undergone coronial autopsies in South Australia in the first 3 months of 2007. Weight and height of all bodies were measured using standard-

	y index of advantage/disadvantage*

SEIFA		Not overweight or obese		Overweight			Obese			
percentile	n	Overall	Boys	Girls	Overall	Boys	Girls	Overall	Boys	Girls
Lowest 10	130	79% (102)	77% (56)	82% (46)	12% (16)	12% (9)	13% (7)	9% (11)	11% (8)	5% (3)
10–25	286	72% (207)	72% (103)	73% (103)	22% (64)	22% (31)	23% (33)	5% (15)	6% (9)	4% (6)
25–50	210	74% (156)	72% (72)	76% (84)	17% (35)	18% (18)	16% (17)	9% (19)	10% (10)	8% (9)
50-75	505	75% (379)	72% (183)	79% (195)	19% (98)	21% (53)	18% (45)	6% (28)	8% (20)	3% (8)
75–90	427	75% (319)	78% (179)	71% (140)	18% (78)	17% (39)	20% (39)	7% (30)	6% (13)	9% (17)
Highest 10	225	77% (174)	79% (84)	76% (89)	17% (39)	16% (17)	19% (22)	5% (12)	6% (6)	5% (6)
Total	1782	75.0% (1337)	74.4% (677)	75.6% (657)	18.5% (330)	18.4% (167)	18.8% (163)	6.5% (115)	7.3% (66)	5.6% (49)

* Overall χ^2 = 11.42, P = 0.33; Boys χ^2 = 8.73, P = 0.56; Girls χ^2 = 12.36, P = 0.26.

SEIFA = Socio-Economic Indexes for Areas (a higher score corresponds to higher socioeconomic status).

ised equipment and were used to calculate BMI by the usual formula.³

A total of 255 individuals aged over 17 years were included in the study (male to female ratio, 2:1; age range, 17–97 years). A third of individuals were classified as obese (BMI \ge 30 kg/m²), and 6% as morbidly obese (BMI \ge 40 kg/m²). The highest BMIs were:

- 132.3 kg/m² (175 kg, 115 cm);
- 109.0 kg/m² (315 kg, 170 cm);
- 82.8 kg/m² (220 kg, 163 cm); and
- 79.5 kg/m² (201 kg, 159 cm).

In comparison, over a similar time period at the same institution in 1986, 17% of individuals were obese, and 3% were morbidly obese, with the four highest BMIs being:

- 55.2 kg/m² (137 kg, 157.5 cm);
- 48.3 kg/m² (148 kg, 175 cm);
- 44.7 kg/m² (137 kg, 175 cm); and
- 41.9 kg/m² (104 kg, 157.5 cm).

This study demonstrates that forensic facilities are now dealing with individuals of considerable body mass. Despite government and industry guidelines for manual handling practices,⁴ these bodies are difficult to lift, move and store, and present major logistical problems for pathologists and technicians attempting to perform standard examinations. Mechanical lifting hoists, x-ray tables and trolleys are often not designed to cope with such weights. Putrefaction is hastened in morbidly obese individuals, and associated skin slippage and purging makes the bodies even more difficult to handle.

Given that autopsies are often required in such individuals to determine the cause of death, consideration must be given to the significant occupational health and safety issues they create for staff in facilities with substandard equipment (ie, designed for normal-sized bodies). The construction of specially designed mortuaries will be required if this trend continues, with larger storage and dissection rooms, and more robust equipment engineered to cope with increasing numbers of individuals with BMIs sometimes considerably greater than 30 kg/m². Failure to provide these may compromise the postmortem evaluation of markedly obese individuals, in addition to potentially jeopardising the health of mortuary staff.

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- 1 Uppot RN, Sahani DV, Hahn PF, et al. Impact of obesity on medical imaging and image-guided intervention. *AJR Am J Roentgenol* 2007; 188: 433-440.
- 2 Hall L. Super-sized cremators in demand as nation's girth all at sea. *Sun Herald* (Sydney) 2007; 29 Apr.
- 3 Hensrud DD, Klein S. Extreme obesity: a new medical crisis in the United States. Mayo Clin Proc 2006; 81 (10 Suppl): S5-S10.
- 4 WorkCover Corporation of South Australia. South Australian Government. Approved Code of Practice for Manual Handling. September 1990. http:// www.safework.sa.gov.au/contentPages/docs/ resCOPManualHandling.pdf (accessed Jun 2007). □

Challenge or opportunity: can regional training hospitals capitalise on the impending influx of interns?

Diann S Eley and David K Morrissey

TO THE EDITOR: The increase in medical graduates expected over the next decade presents a huge challenge to the many stakeholders involved in providing their prevocational and vocational medical training.¹ Increased numbers will add significantly to the teaching and supervision workload for registrars and consultants, while specialist training and access to advanced training positions may be compromised. However, this predicament may also provide opportunities for innovation in the way internships are delivered.

Although facing these same challenges, regional and rural hospitals could use this situation to enhance their workforce by creating opportunities for interns and junior doctors to acquire valuable experience in non-metropolitan settings.

We surveyed a representative sample (n = 147; 52% of total cohort) of Year 3 Bachelor of Medicine and Bachelor of Surgery students at the University of Queensland about their perceptions and expectations of their impending internship and the importance of its location (ie, urban/metropolitan versus regional/rural teaching hospitals) to their future training and career plans.

Most students (n = 127; 86%) reported a high degree of contemplation about their internship choice. Issues relating to career progression and support ranked highest in their expectations. Most perceived internships in urban/metropolitan hospitals as more beneficial to their future career prospects compared with regional/rural hospitals, but, interestingly, felt that they would have more patient responsibility and greater contact with and supervision by senior staff in a regional setting (Box).

Regional and rural hospitals should try to harness these positive perceptions and act to address any real or perceived shortcomings in order to enhance their future workforce.² They could look to establish partnerships with rural clinical schools³ to

Year 3 medical students' perceptions of internship in a regional/rural hospital versus an urban/metropolitan hospital

Perception	Strongly disagree	Disagree	Not sure	Agree	Strongly agree
My acceptance onto a training program will be influenced by the reputation of the hospital in which I do my internship	4% (5)	18% (24)	28% (38)	43% (59)	8% (11)
l would have less responsibility for my patients in a regional/rural hospital	21% (29)	67% (92)	12% (17)	0	0
There would be more contact with senior staff in an urban/metropolitan hospital than in a regional/rural hospital	11% (15)	48% (66)	29% (39)	11% (15)	2% (2)
l would have more clinical supervision in an urban/metropolitan hospital than in a regional/rural hospital	11% (15)	47% (64)	25% (34)	15% (20)	2% (3)
l would feel more part of a team in an urban/metropolitan hospital than in a regional/rural hospital	11% (15)	60% (83)	27% (38)	2% (3)	0

Numbers are percentage of respondents (number of respondents). Denominators vary due to missing responses.

enhance recruitment of interns as early as Year 3. To maximise competitiveness with their urban counterparts, regional and rural hospitals need to offer innovative training and career progression pathways to junior doctors, to combat the perception that internships in urban hospitals are more beneficial to future career prospects. Partnerships between hospitals, medical schools and vocational colleges, with input from postgraduate medical councils, should provide vertical integration⁴ in the important period between student and doctor.

Work is underway to more closely evaluate and compare the intern experience across regional/rural and urban/metropolitan hospitals, and track student experiences and career choices longitudinally. This information may benefit teaching hospitals and help identify the optimal combination of resources necessary to provide quality teaching and a clear career pathway for the expected influx of new interns.

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- Crotty BJ, Brown T. An urgent challenge: new training opportunities for junior medical officers. *Med J Aust* 2007; 186 (7 Suppl): S25-S27.
- 2 Eley D, Baker P. Does recruitment lead to retention? Rural clinical school training experiences and subsequent intern choices. *Rural Remote Health* [Internet] 2006; 6: 511. http:// www.rh.org.au/articles/showarticlenew.asp?ArticleID=511 (accessed Jun 2007).
- 3 Australian Government Department of Health and Ageing. Rural Clinical Schools Program. http://www.health.gov.au/clinicalschools (accessed Mar 2007).
- 4 Jolly BC. The new curriculum framework and assessment practices: current challenges for postgraduate years 1 and 2. *Med J Aust* 2007; 186 (7 Suppl): S33-S36.

Intern choices for James Cook University graduates

Tarun Sen Gupta, Richard B Hays and Richard B Murray

TO THE EDITOR: We report that the internship location choices of the second cohort of medical students to graduate from James Cook University (JCU) are very similar to those of the first cohort.¹ Of the 75 students who graduated in the second cohort in 2006, 65 (87%) are working in Queensland; 42 (56%) in North Queensland (roughly the area north of Mackay). Fifty-three (71%) are in non-metropolitan hospitals, including three of the 10 graduates who moved or returned interstate.

These proportions reflect the cohort's geographic origins. As in the first cohort, a small number of students (13; 17%) of North Queensland origin moved away and a similar number (14; 19%) from elsewhere stayed in North Queensland. Further, a majority of the first cohort have remained where they undertook internship: 24 of 29 (83%) have remained in North Queensland and one commenced remote practice, consistent with the group's stated intentions to work in regional locations.² Hence, JCU's first two graduating cohorts had a combined effect of strong recruitment to nonmetropolitan hospitals, particularly in Queensland, some of which have experienced difficulty in recruiting junior staff.

These results have two implications. First, they contribute to the debate on selection into medicine.³ JCU gives weight to rural schooling, with about two-thirds of each cohort having a rural background, and a similar proportion coming from North Queensland.⁴

Second, there are workforce policy implications. The growth in medical school numbers over the past 3 years has not evenly reflected workforce needs or availability of postgraduate training places. As some urban areas become oversupplied with junior doctors, it will be important not to neglect areas of maldistribution that are drivers of growth. Regional training pathways for specialist and generalist careers need urgent definition; graduates in Queensland are expected to increase from 300 in 2007 to 727 in 2014, so vocational training places will need to more than double.⁵ An impact on the Australian medical workforce shortage will only be felt when a number of cohorts have graduated from JCU and other regional schools, and

bottlenecks to subsequent training are removed.

It will take another decade to obtain a clear picture of postgraduate career outcomes for this group, but the investment in regional medical education in North Queensland appears at this stage to be having the desired effect. If this effect is sustained and replicated in other new regional medical schools, Australia may soon have an adequate supply of medical graduates who both understand and choose to live and work in regional Australia.

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- 1 Hays RB, Wronski I, Veitch J, McCloskey T. Intern choices for the first graduates of James Cook University [letter]. *Med J Aust* 2006; 184: 94.
- 2 Veitch C, Underhill A, Hays RB. The career aspirations and location intentions of James Cook University's first cohort of medical students: a longitudinal study at course entry and graduation. *Rural Remote Health* [Internet] 2006; 6: 537. http:// www.rrh.org.au/articles/showarticlenew.asp?ArticleID=537 (accessed Jun 2007).
- 3 Van Der Weyden MB. From the Editor's desk. Medical student selection — we have to find another way. *Med J Aust* 2007; 186: 329.
- 4 Hays RB, Bower AJ. Modifying academic ranking of rural and remote medical school applicants [letter]. *Med J Aust* 2001; 174: 371-372.
- 5 Additional Medical Graduates Project. Medical education support discussion paper. Brisbane: Queensland Health, 2007.

Transition Care: what is it and what are its outcomes?

Ian D Cameron and Owen Davies

TO THE EDITOR: The Transition Care Program (TCP) is a joint federal and state government program that provides shortterm (8–12 weeks) support and therapy to improve functioning for older people who are hospitalised (either in public or private hospitals) and would otherwise require admission to a residential aged care facility.¹ Participants are provided with a care package that assists with activities of daily living, and provides limited allied health, nursing and medical input, with the aim of improving functional status, if possible.

The TCP is currently being implemented across Australia. We selected and audited three transition care services that com-

Comparison of background, status and outcomes for participants in three Transition Care Program (TCP) services

	Service A (community) (n = 30)	Service B (residential) (n = 30)	Service C (community) (n = 29)	Statistical significance*
Mean age (SD) in years	80.9 (7.9)	84.5 (5.1)	80.4 (8.0)	ns
Female	60%	47%	59%	ns
Living alone	40%	47%	62%	ns
Primary diagnosis — trauma (fractures and falls)	43%	20%	41%	ns
Barthel Index				
On admission to the TCP — mean (SD)	66.9 (13.8)	55.2 (26.8)	69.2 (19.1)	F=3.85; P=0.025
On discharge from the TCP — mean (SD)	72.8 (17.6)	56.4 (34.2)	82.8 (22.0)	F=7.69; P=0.001
Mean change (SD)	5.9 (21.3)	1.5 (19.0)	11.6 (13.3)	ns
Discharge status — in the community [†]	60%	20%	76%	$\chi^2 = 35.6; P = 0.000$

* Based on a comparison between the three groups (x² test for categorical data, and analysis of variance [*F* test] for continuous data). † Patients were in the Program for 12 weeks unless they left early because of admission to hospital or permanent admission to a residential care facility. ns = not significant.

menced operation early in the program (2005 and early 2006), with the aim of describing the outcomes of these services, and determining whether the older people participating in the various services were similar. Approval was obtained from the relevant ethics committees.

Three services were purposefully sampled: two services in Adelaide (Service A providing packages in a community setting, and Service B providing packages in a high-level care, residential aged care setting); and one service in Sydney (Service C providing packages in a community setting). The residential package allocates temporary residential placements for patients with defined rehabilitation goals, and thus also frees up acute care hospital beds. These services supplied de-identified audit data about the first 30 participants, who were in the program between June and December 2006.

A summary of the data is given in the Box. The participants in the residential program tended to be older, more likely to be male, and less likely to have "fracture or fall" as their primary diagnosis. These older people also had more severe disability that generally does not improve, and were significantly less likely to return to community living. The two community-based programs were generally similar.

The data suggest that there is considerable variation between the TCP services, with the residential service providing packages to older people with severe disability who generally remain in a residential aged care program, although some may improve from high- to low-level aged care services. By contrast, the outcome of the community-based services is generally maintenance in the community and is associated with an improvement in functioning. This profile is similar to that of a communitybased rehabilitation service for older people. It is not clear from the TCP guidelines whether this level of variation in program implementation was anticipated.¹

This limited audit suggests that the Australian TCP is not homogeneous and is substituting for other forms of treatment and care. Thus, there is provision of highlevel residential care as a substitute for waiting for residential aged care in a hospital bed, and community rehabilitation as a substitute for rehabilitation services provided by state health departments. This situation is potentially beneficial to older people who previously did not have access to these services, but it also could mean that state governments may not establish rehabilitation services for older people, or may even cease providing these services.

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1 Australian Department of Health and Ageing. Transition Care Program guidelines – 2005. Canberra: DHA, 2005. http://www.health.gov.au/internet/wcms/publishing.nsf/content/ageingtransition-guidelines.htm (accessed Jun 2007). □

Beyond the evidence: is there a place for antidepressant combinations in the pharmacotherapy of depression?

David P Horgan

TO THE EDITOR: In an ironic clinician– academic dichotomy, in the same month that the Royal Australian and New Zealand College of Psychiatrists published a survey showing that 79% of Australian psychiatrists combine antidepressants and 75% of psychiatrists believe that general practitioners should be given information on this topic,¹ Keks et al chose a non-psychiatric journal to "mandate that combinations be used as a last resort, and only in specialist settings".²

Specialists have voted with their prescription pads. That a large majority of Australian psychiatrists feel ethically and clinically obliged to use combination antidepressants speaks volumes about the poor results from the suggestions outlined by Keks et al. The multiple clinical reports and reviews of the benefits of combination antidepressants,³ the suffering and death from depression, and the very low rate of complications reported to the Adverse Drug Reactions Advisory Committee from combination antidepressants do not allow the luxury of awaiting combination therapy research which may never happen. Many combinations of antihypertensives or antiasthma medications similarly lack such rigorous proof, but are widely used. Isolated case reports of medication complications must be seen as such.

Access to psychiatrists for combination antidepressant therapy is a well intentioned but currently impractical suggestion. Most psychiatrists have massive waiting lists, and research confirms treatment resistance and progressive cell death in the hippocampus of depressed patients while awaiting effective treatment.

Australian GPs are just as capable of using combination antidepressant therapy

as their international colleagues, if given the same simple information and training. Canadian GPs read in their journals advice about using combination antidepressants. Anecdotally, many Australian GPs combine antidepressants, but express the wish that the issue could be discussed openly, without them feeling intimidated. Even textbooks of psychiatry, drafted some years ago, teach about combination antidepressants. In the United States, the National Institute of Mental Health STAR*D study of 4000 patients approved combination antidepressants such as venlafaxine with mirtazapine years ago, with no safety concerns.⁴ Keks et al refer to treatments that today are unacceptable to many, ranging from electroconvulsive therapy to tricyclic antidepressants, despite GPs and psychiatry trainees having been warned for years by academics that tricyclics are outdated, "dirty" and dangerous.

Informed consent requires that patients be informed of all therapies that are relevant to their care and survival, and 88% of psychiatrists believe patients should be informed of combination antidepressants.¹ Recent results from the STAR*D study demonstrate the superiority of modern combination antidepressants, with no statistically based evidence that they should not be used.⁵

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- 1 Horgan D, Dodd S, Berk M. A survey of combination antidepressant use in Australia. *Australas Psychiatry* 2007; 15: 26-29.
- 2 Keks NA, Burrows GB, Copolov DL, et al. Beyond the evidence: is there a place for antidepressant combinations in the pharmacotherapy of depression? *Med J Aust* 2007; 186: 142-144.
- 3 Dodd S, Horgan D, Mahli G, Berk M. To combine or not to combine? A literature review of antidepressant combination therapy. J Affect Dis 2005; 89: 1-11.
- 4 Fava M, Rush AJ, Trivedi MH, et al. Background and rationale for the sequenced treatment alternatives to relieve depression (STAR*D) study. *Psychiatr Clin North Am* 2003; 26: 457-494.
- 5 McGrath PJ, Stewart JW, Fava M, et al. Tranylcypromine versus venlafaxine plus mirtazapine following three failed antidepressant medication trials for depression: a STAR*D report. *Am J Psychiatry* 2006; 163: 1531-1541.

Murray J Walters, Alston M Unwin and Sean B Gills

TO THE EDITOR: Keks et al make a number of important points about the place of combination antidepressant strategies in the pharmacotherapy of depression.¹ However, it is important for readers

to note that the vigorous repudiation of combination treatments is a peculiarly Australian preoccupation. Our colleagues in Europe and North America are not nearly so troubled.

Combination antidepressant treatments are widely used by specialists. A recent survey of Australian doctors working in psychiatry reported that 79% of respondents had used combination antidepressants and that 75% believed that general practitioners should be given information on their use.²

There is emerging evidence for the use of combination antidepressant strategies from case series, open clinical trials, and randomised controlled trials (RCTs). The largest summation of the data is a metaanalysis which found that combination antidepressant treatment produced a 62% response rate when monotherapy had failed.³ Although this finding alone cannot be convincing because of the acknowledged lack of large sample RCTs, it is quite another matter to decry combination prescribing as clinically unsound based only on the history of augmentation treatments such as lithium and, to a lesser extent, thyroid hormone treatment when, anecdotally, they provide such clinically disappointing results.

It is not unreasonable to assert the primacy of good clinical reasoning, including sensible prescribing of combination antidepressants, over rigid adherence to evidenced-based algorithms. This sort of thinking is allowable because the evidence base for the treatment of depression is poor. Meaningful guidelines cannot be produced while the evidence is predicated on the flawed proposition that depression is an "it" (a homogenous construct).⁴

GPs might well be puzzled by the zeal in academic psychiatry for monotherapy. They are advised to "optimise" monotherapy, but not told what this means. They are very familiar with models of staged polypharmacy for common chronic illnesses such as hypertension, epilepsy, diabetes, and asthma, but in psychiatric pharmacotherapy this is apparently unwise or too risky.

The way such admonishments are usually framed is by reference to serious but rare adverse reactions (like the serotonin syndrome), without proper attention to the equally serious and probably more common problems with the current "simple" psychotropic drug options already used by GPs. Failure to contextualise these risks leads to a distortion of risk-benefit prescribing decisions and an unnecessary restriction of treatment choices.

We must have a commonsense approach to the treatment of depression that recognises the proper context of our knowledge base. Combination antidepressant treatments may be "beyond the evidence", but this alone is not a sufficient justification to stop using them.

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- 1 Keks NA, Burrows GB, Copolov DL, et al. Beyond the evidence: is there a place for antidepressant combinations in the pharmacotherapy of depression? *Med J Aust* 2007; 186: 142-144.
- 2 Horgan D, Dodd S, Berk M. A survey of combination antidepressant use in Australia. Australas Psychiatry 2007; 15: 26-29.
- 3 Lam R, Wan D, Cohen N, Kennedy S. Combining antidepressants for treatment resistant depression: a review. J Clin Psychiatry 2002; 63: 826-837.
- 4 Parker G. Evaluating treatments for the mood disorders: time for the evidence to get real. Aust N Z J Psychiatry 2004; 38: 408-414.

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IN REPLY: The letters by Horgan and Walters et al underline our motive for reviewing antidepressant combinations. The conclusions of the survey are at least questionable, given that the response rate was only 36%, 18% of respondents were not psychiatrists, and affirmative responders may have only used combination antidepressants once.¹ In any case, should clinical popularity substitute for evidence? If so, once popular but now research-discredited treatments such as insulin coma therapy would still be used.

Equating combination antidepressants to combination drugs for asthma and hypertension is misleading. How often are two β -blockers given together in maintenance treatment? Major depression causes severe suffering, but this does not justify the use of unproven treatments ahead of those supported by evidence.

General practitioners should be informed about antidepressant combinations, but the information must be evidence-based. We described the process of dose optimisation, and stand by our advice that complex cases that require unproven

treatment (such as combination antidepressants) be referred to a psychiatrist.

Patients should also be informed about combination antidepressants, including the paucity of evidence concerning efficacy and safety, the absence of information about consequences of long-term treatment, and that some combinations are lethal and others frequently unsafe.

Published data from the STAR*D study provide equivocal support for the combination of citalopram and bupropion, as we noted. Evidence of modest effectiveness (remission rate, 13.7%) for the combination of mirtazapine and venlafaxine has appeared.²

Our conclusion was that some antidepressant combinations could be used in certain clinical situations where evidencebased treatments have failed, with safeguards. Given that 17% of respondents to the survey¹ observed serious complications with combination antidepressants, this is good advice.

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- 1 Horgan D, Dodd S, Berk M. A survey of combination antidepressant use in Australia. *Australas Psychiatry* 2007; 15: 26-29.
- 2 McGrath PJ, Stewart JW, Fava M, et al. Tranylcypromine versus venlafaxine plus mirtazapine following three failed antidepressant medication trials for depression: a STAR*D report. Am J Psychiatry 2006; 163: 1531-1541.

Writing to the next of kin after the death of a patient

lan T Jones

TO THE EDITOR: In his "Personal perspective" piece, Allen¹ reminded us all of how medicine can at times truly be the noblest of professions. Writing to the next of kin after the death of a patient is occasionally a difficult task, but more usually provides an appropriate form of closure, not only to the relationship with the deceased patient, but also to relationships with the person's partner, family members and friends whom you may have met during the treatment episode and whom you may not see again.

Since I began practice as a consultant 20 years ago (a practice that involves a substantial number of patients who require surgery for cancer), I have tried to write to the next of kin or significant other of every patient who has died while under my care.

The letter allows me the opportunity to say perhaps how brave the patient had been in the face of adversity or to acknowledge the support the next of kin had provided. A simple expression of condolence and an indication of how much a loved one may be missed seems to be the best way to "sign off".

Such letters are only a small gesture, but I have often been gratified by how much comfort they seem to provide to those who receive them, and in all this time I have never had a response that could even remotely be considered "negative".

In this current day, when practising clinicians appear to have a diminished role in our medical schools, may I suggest that Allen's article — which I think is a great example of what is meant by the "art of medicine" — be distributed to our universities and colleges to be considered for inclusion in their teaching material and curricula.

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¹ Allen RKA. On the merits of writing to the next of kin after the death of your patient: an Australian perspective. *Med J Aust* 2007; 186: 425.