letters
TO THE EDITOR

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Advance decisions on resuscitation

Editor – Regnard and Randall's framework for making advanced decisions on resuscitation (*Clin Med* July/August 2005 pp 354–360) is pragmatic, sensible and workable.[1] I agree that current guidelines lack clarity and consensus, and this is reflected in a wide variation of practice in the UK.[2] Some hospital policies state that doctors have to ask every patient or the patient's family to decide on their resuscitation status – regardless of their premorbid health or cognitive status, or whether they want to discuss the issue. Consequently, many patients over 90 years old with multiple comorbidities and very poor premorbid functional status, for example, are still 'for resuscitation'. Although this might be suitable for a small number of these patients, clinical experience tells us that this could not be in the patient's best interest for the majority.

Few studies have examined the long-term survival for older patients who have undergone in-hospital resuscitation (ranging from 6% to 18%),[3,4] and most of these studies have included only highly selected patients and lack external validity. Moreover, they have generally not explored the quality of life for long-term survivors or included the 'very old' or 'very frail' patients. Without such information, patients are not truly informed when discussions take place. The method of asking the patient about resuscitation status may also influence the outcome. For example, the answer to the question 'Mrs X, if your heart stops, would you like us to restart it?' is likely to be 'yes'. However, if the patient is told what resuscitation can actually involve (eg use of electrical shocks and insertion of endotracheal tube), the 'no' answer might be more frequent.

As a geriatrician who manages many very frail elderly patients, I welcome Regnard and Randall's recommendation that the patient or family should *not* be burdened with a resuscitation decision if the clinical team is as certain as it can be that resuscitation *cannot* help the patient, or if cardiac arrest *cannot* be anticipated.[1] They also propose that resuscitation efforts for unexpected cardiac arrests should be commenced only if there is a *reasonable* possibility of success.[1] Accurate information about the latter could only come from further studies.

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Risk communication

Editor – Professor Thomson and colleagues have provided a welcome overview of the challenge of communicating to patients the mathematics surrounding the relative benefits and hazards of different treatment options (*Clin Med* September/October 2005 pp 465–9). They highlight the importance of finding the right vocabulary for explaining to a patient the likelihood of v arious outcomes – rightly encouraging us, for example, to choose phrases which use consistent denominators and describe absolute risk.

However, their article focuses largely on the likelihood of an event (adverse or beneficial) occurring, and they refer to this likelihood as risk. A more rigorous mathematical definition of risk includes assessment of both the likelihood (the odds) and the significance (the stakes) of the outcome. Thus, a patient may be prepared to accept the risk of an adverse event if it is fairly common but trivial, but not if it is more rare but fatal. The use of warfarin in atrial fibrillation is a good example: we may be tempted to compare the likelihood (the odds) of an embolic stroke to that of a gastrointestinal (GI) bleed, but we should add that most people recover from a GI bleed with prompt treatment, whereas the same is not true of a stroke. The stakes are higher when considering a stroke, and this has a big impact on overall assessment of the risk.

So risk = odds × stakes. As individuals, we often find it difficult to make a meaningful assessment of risk, especially when it comprises a very unlikely event with a highly significant outcome – the National Lottery does so well because it relies on the inability of the general population to make a rational assessment in combining these two distinct components of risk. A good gambler and an insurance company will take into account both the odds and the stakes; a good physician should do so too.

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Cardiac amyloidosis

Editor – Maredia and Ray (*Clin Med* September/October 2005 pp 504–9) give a

comprehensive account of cardiac amyloidosis, and describe two cases of AL-amyloidosis. As a haematologist with some experience of systemic AL-amyloidosis, I would like to add further relevant comments with regard to diagnosis and treatment.

Firstly, with respect to diagnosis, measurement of serum free light-chains is a very important recent development not mentioned in the article. The monoclonal gammopathy in AL-amyloid is often very subtle, below the level of detection by the standard test of immunoelectrophoresis; this serum free light-chain assay is approximately 500 times more sensitive,[1] much more convenient than collecting a quantitative 24-hour urinary collection, and a useful monitor of response to treatment. Its use is recommended in the British Committee for Standards in Haematology (BCSH) 'Guidelines on the diagnosis and management of AL amyloidosis'.[2]

The serum amyloid-P scan is mentioned as being useful only in the preoperative assessment for cardiac transplant. Although poor at assessing cardiac amyloid, it still has an important role in the initial analysis of the patient's overall amyloid load and number of other organs involved,[3] which has an impact on overall prognosis and bone-marrow transplant-related mortality rate.

Secondly, there are two main problems with chemotherapy treatment in this condition. The first is the time taken to achieve a response (often longer than predicted survival). The treatment aims to reduce the monoclonal light-chains, hence shifting the balance from deposition to mobilisation of amyloid, known to be a dynamic process, but occurring particularly slowly in cardiac tissue. The second is the inability to tolerate the agents used, eg fluid retention caused by steroids. In addition to standard use of melphalan, a report by Sanchorawala *et al*[4] of continuous use of low-dose melphalan in patients with significant cardiac involvement concluded that this well-tolerated regime was effective in patients receiving total doses of >300 mg. Novel agents are increasingly used in the management of myeloma, eg proteasome inhibitors, which may also be helpful in AL-amyloidosis. We recently reported successful treatment of a patient with cyclophosphamide, thalidomide and dexamethasone.[5]

Finally, patients with amyloidosis have significant bleeding risk from vasculopathy due to amyloid deposition in vessels and various coagulation defects. Patients requiring anticoagulation therefore need particularly close monitoring.

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In response

We are grateful for Dr Myers' comments, which highlight a number of issues surrounding the use of chemotherapeutic agents, steroids and anticoagulation in this condition. We agree that the measurement of serum free light-chains will simplify both diagnosis and follow-up of patients with cardiac amyloid and have recently begun using it in our own practice.

Dr Myers' comments about the difficulties of chemotherapy in cardiac amyloid emphasise the need for close cooperation between cardiologists and haematologists in the management of these complex patients. Fluid retention can be a major problem and there is often a very fine balance between symptomatic oedema and symptomatic intravascular volume depletion.

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Conundrum of BMI measurements

Editor – 'What is wrong with the Body Mass Index?' in Conversations with Charles (*Clin Med* May/June 2005 pp 301–2) was especially interesting and entertaining. Indeed, it was a welcome note highlighting the myths surrounding the accuracy of Body Mass Index (BMI) measurements as a sole measure of the population's health. This topic has received much public attention not just since the Radio 4 debate on BMI and health but also since the release of the much acclaimed book *Super Size Me* by the Amercian author Morgan Spurlock.

Charles is right to point out that BMI (weight/height^2) is more closely associated with the observed risk compared with the 'ponderal index' (weight/height^3), which is closely associated with body fat – the latter measurement providing a more reliable comparitive measure. In addition, he is also right to recognise that increasing abdominal obesity is critical when assessing risk. Hence, in the proposed 'Charles index' or 'health index' he incorporates waist measurement – weight/(waist^2 × height). However, one cannot help but feel this proposed health index may be too simplistic and that it requires a combination of factors to be considered.

There is a growing body of evidence to suggest that other factors apart from BMI alone may be important in assessing health. For example, increasing BMI is associated with higher death rates for all cancers (stomach and prostate in men; breast, uterine and ovarian in women).[1] Furthermore, waist/hip ratio has been shown to be a better marker of abdominal fat.[2] This has been shown also to be an independent marker of high blood pressure[2] and risk for developing ovarian cancer.[3] In the European Prospective Investigation into Cancer and Nutrition (EPIC) study,[4] hip measurement alone correlated with the risk of breast cancer in