- 3 Keefe DL. Trastuzumab-associated cardiotoxicity. Cancer 2002;95:1592–600.
- 4 Maisel AS, Krishnaswamy P, Nowak RM et al. Rapid measurement of B-type natriuretic peptide in the emergency diagnosis of heart failure. N Engl J Med 2002;347:161–7.

In response

Change in left ventricular ejection fraction (LVEF) as a method for detecting cardiotoxicity, whether by echocardiography, cardiovascular MR, or equilibrium-gated radionuclide ventriculography, is a blunt instrument. LVEF is not a direct measurement of myocardial contractility and physiological compensatory changes may mask significant early cardiac damage. Variability in measurement does not only occur as a result of methodology but also due to changes in loading conditions. Nevertheless, such testing has been of fundamental importance in many landmark studies because the individual variation and interpretative artefacts are largely equalised when large populations are studied. The technique becomes more problematic when attempting to guide individual therapy, particularly when testing is performed every three months and detection of cardio toxicity becomes to some extent 'retrospective'.1

Brain natriuretic peptide (BNP) and N-terminal pro-brain natriuretic peptide (NT-pro BNP) have an extensive evidence base in the diagnosis of heart failure² and for the assessment of prognosis.3 Elevations in both biomarkers have been shown in stable coronary artery disease, unstable coronary syndromes and in valvular heart disease.4 One potential use is therefore in the screening of patients prior to initiation of cardiotoxic chemotherapy to exclude those with pre-existing disease. A second option with greater potential is hinted at in the letter from Knobloch et al - that of using such a biomarker during chemotherapy infusion to provide immediate feedback regarding risk of subsequent dysfunction. As yet, however, there are limited data available that focus on the therapeutic implications derived from BNP and NT-pro BNP assessment. It is known that levels increase with age and this may confound study of trastuzumab toxicity, which is also age-dependent. Levels can also be altered by a number of other factors, including renal dysfunction.⁵ There are studies of BNP and NT-pro BNP currently underway for screening and risk assessment in patients with malignant disease being treated with cardiotoxic chemotherapeutic agents. The major difficulty will be the identification of a 'cut-off' for abnormality, since there is no age-adjusted normal range, although serial comparisons may partially overcome this.

HC ROUTLEDGE, ¹ DW REA, ² RP STEEDS ¹
University of Birmingham Department of
Cardiology ¹ and
Institute for Cancer Studies ²
Queen Elizabeth Hospital, Birmingham

References

- National Institute for Health and Clinical Excellence. Trastuzumab for the adjuvant treatment of early-stage HER2-positive breast cancer. London: NICE, 2006. www.nice.org.uk/TA107.
- 2 de Lemos JA, McGuire DK, Drazner MH. B-type natriuretic peptide in cardiovascular disease. *Lancet* 2003;362:316–22.
- 3 Anand IS, Fisher LD, Chiang YT *et al.* Changes in brain natriuretic peptide and norepinephrine over time and mortality and morbidity in the Valsartan Heart Failure Trial (Val-HeFT). *Circulation* 2003;107:1278–83.
- Weber M, Hamm C. Role of B-type natriuretic peptide (BNP) and NT-proBNP in clinical routine. *Heart* 2006;92:843–9.
- 5 Redfield MM, Rodeheffer RJ, Jacobsen SJ. Plasma brain natriuretic peptide concentration: impact of age and gender. J Am Coll Cardiol 2002;40:976–82.

A pain tool for people with communication difficulties is no closer

Jackson *et al* have produced a novel variation of a pain scale (*Clin Med* November/ December 2006 pp 580–85). Sadly their hope that this scale might be applied to people with communication impairments is based on a misunderstanding of the issues involved.

With regard to patients unable to qualitatively describe the cause of their distress, there is increasing evidence that pain tools will respond as much to non-pain distress as to pain. ^{1,2,3} Jackson and colleagues acknowledge this, but fail to ask a vital question: is there any evidence that pain

produces any specific signs and behaviours?4 To date, no such evidence has been found,^{3,5} suggesting that pain assessment is not a feasible goal in a person with a severe communication impairment. This lack of evidence sits uncomfortably with the multitude of pain tools that have been developed for people with cognitive or communication impairments. Very few of these tools have been validated,3 however, while those that claim to have been validated have failed to address two key issues. Firstly, a 'pain' tool will be correct on many occasions, not because it is measuring pain but because pain is so common. Secondly, pain tools will pick up causes of distress other than pain.³ If an analgesic is given for non-pain distress then any sedation will settle the distress, giving the false impression that pain has been relieved. There are two consequences of using a pain tool in these patients. Non-pain distress will be misinterpreted as pain resulting in inappropriate analgesic use; and non-pain causes of distress will be missed and remain untreated. No one would agree to the suggestion that a distressed patient with severe communication impairment should be given morphine, and yet administering a pain tool could have the same effect.

Jackson *et al*'s tool could be a useful communication aid in patients with mild to moderate communication impairments who are able to explain the cause of their distress. For patients who lack this communicative or cognitive ability, however, it will be necessary to work through a process of documenting the signs and behaviours of their distress,³ and then placing the distress in context, identifying a pattern and trying interventions for the likeliest causes.⁵ Such a process is beneficial for patients and is empowering for staff.⁵

CLAUD REGNARD Consultant in Palliative Care Medicine St Oswald's Hospice, Newcastle upon Tyne

References

- Herr KA, Mobily PR, Kohout FJ, Wagenaar D. Evaluation of the Faces Pain Scale for use with the elderly. Clin J Pain 1998;14:29–38.
- McGrath PA, Seifert CE, Speechley KN, Booth JC. A new analogue scale for assessing children's pain: an initia; validation study. *Pain* 1996;64:435–43.
- 3 Herr K, Bjoro K, Decker S. Tools for

- assessment of pain in nonverbal older adults with dementia: a state-of-the-science review. *J Pain Symp Manag* 2006;31:170–92.
- 4 Regnard C, Mathews M, Gibson L, Clarke C. Difficulties in identifying distress and its causes in people with severe communication problems. *Int J Palliat Nurs* 2003;9:173–6.
- 5 Regnard C, Reynolds J, Watson B et al. Understanding distress in people with severe communication difficulties: developing and assessing the Disability Distress Assessment Tool (DisDAT). J Intellect Disability Res 2006. doi:j.1365-2788.2006.00875.x

In response

This letter raises two important issues concerning the assessment of pain in people with communication impairments.

The first questions the validity of judging the presence and severity of pain from observed behaviours in a communication-impaired population. For some of these individuals there is no other option but to assess pain by proxy and we would entirely agree that the generic behavioural pain scales that have been developed for this purpose are neither reliable nor sensitive enough to provide more than a suggestion of the presence of pain or discomfort. Further detective work on the part of the clinical team is essential before decisions can be made about intervention.

The second concerns a patient's ability to comprehend the concept of pain sensation, as opposed to pain affect or other distress, and to use a pain tool to indicate its presence and severity. We see no reason why dysphasic patients, many of whom are already disenfranchised from engaging in discussion about their care, should not be given the opportunity to convey information about their pain, or any other subjective state, with the assistance of enhanced tools presented by trained staff, for example speech and language therapists. Many of these patients have difficulty using traditional rating scales1 and we have found that creating a 'communication ramp' by using the scale of pain intensity (SPIN) alongside pictures and gestures can enable some to communicate successfully about pain,² which is empowering for both staff and patients.

Caution is, however, always needed

when interpreting information about pain, whether through self-report or by proxy, and we would agree with others³ that a comprehensive pain assessment should consider both these sources as offering complementary perspectives on what is often a complex clinical picture.

DIANA JACKSON,¹ SANDRA HORN,² PAULA KERSTEN,² LYNNE TURNER-STOKES¹ King's College, London¹ and University of Southampton²

References

- Turner-Stokes L, Rusconi S. Screening for ability to complete a questionnaire: a preliminary evaluation of the AbilityQ and ShoulderQ for assessing shoulder pain in stroke patients. Clin Rehabil 2003;17:150–7.
- 2 Jackson D, Kersten P, Horn S, Turner-Stokes L. A pictorial scale of pain intensity (SPIN) for patients with communication impairments. *Int J Ther Rehabil* 2006;13:457–63.
- 3 Hadjistavropoulos T, Craig KD. A theoretical framework for understanding self-report and observational measures of pain: a communications model. *Behav Res Ther* 2002;40:551–70.

Tuberculosis: where are we going?

Thwaites' excellent editorial detailing the latest advances in research into new drugs, vaccines and diagnostics for tuberculosis (TB) finished on an upbeat note with a call for 'unsurpassed cooperation between scientists, clinicians and politicians' (*Clin Med* November/December 2006 pp 523–5). One word seemed to be missing: money.

Current funding for all research into TB is estimated to be under \$500,000,000, approximately half of that required to fund a single drug in development from discovery to clinical use. Yet this amount has to be spread across all drug, vaccine, diagnostic and operational research. A recent report shows that the World Bank funding into TB in Africa is wholly inadaquate.1 In contrast funding for the World Health Organization's other priorities, HIV/Aids and malaria, is reasonable. As the editorial points out, TB is increasing at 1% a year across the globe and 5% in areas of high HIV prevalence. In the UK the increase over the last year has been 11%.2

In 2004 the Chief Medical Officer's report on TB resulted in a flurry of committee activity and well-intentioned rec-

ommendations. In 2006 the National Institute for Health and Clinical Excellence published its guidelines on the management of TB.³ Despite these initiatives, evidence is accumulating that we are not even maintaining previous levels of service as funding is being reduced at a local level.

Unless the world in general and the UK government in particular wake up to the fact that we cannot bring TB under control without adequate resources the situation is going to deteriorate badly.

PETER D.O. DAVIES Consultant Chest Physician Cardiothoracic Centre, Liverpool

References

- Results International. Enduring neglect: the World Bank's inadequate support for Africa's TB emergency. Washington, DC: Results International, 2006.
- 2 Health Protection Agency. Focus on tuberculosis: annual surveillance report 2006. November 2006. www.hpa.org.uk/publications/2006/tb_rep ort/default.htm.
- 3 National Institute for Health and Clinical Excellence. Tuberculosis: clinical diagnosis and management of tuberculosis, and measures for its prevention and control. London: NICE, 2006

Self-harm in the general hospital

Editor – I was interested to read Kapur's article (Clin Med November/December 2006 pp 529-32). I would just like to take issue with the perspective which looks largely at the impact of family and society on the behaviour and outcome of the patient, but little in the opposite direction. In particular, I am interested in the impact that a parent's suicide attempt may have on their children, and more alarmingly the strong association between mothers who harm themselves and physically abuse or neglect their children.1,2 I think it is of paramount importance that when a parent of young children attempts suicide, the welfare and safety of the children is taken into account. This would entail taking a complete family history, and viewing parental self-harm as a child protection crisis. It might involve, with the patient's consent, informing general practitioners, health visitors, school nurses or paediatricians. I would certainly recommend that in