

## HENRY MATTHEW'S CONTRIBUTION

The excellent paper by AT Proudfoot and LF Prescott on the pioneering work of Henry Matthew (*J R Coll Physicians Edinb* 2009;39:357–61) makes passing reference to his collaboration with psychiatrists at the Regional Poisoning Treatment Centre (RPTC) at the Royal Infirmary of Edinburgh. This point requires amplification.

One of Henry Matthew's major contributions to the diagnosis and management of patients with self-poisoning and other forms of self-harm was to help organise a team of psychiatrists working full-time alongside the physicians. Every admission, and at that time there were more than 1,000 a year, was assessed by both teams, and agreement reached on treatment and subsequent clinical management. Complex cases were reviewed at twice-weekly meetings, attended by all the staff – an ideal setting for mutual education. This model of co-operation was taken up and expanded, with Henry Matthew's enthusiastic support in the establishment of a liaison psychiatry service operating throughout the Royal Infirmary – one of the first of its kind in the country.

Moreover, as Proudfoot and Prescott mention, the psychiatric staff were often drawn from the Medical Research Council Unit for Epidemiological Studies in Psychiatry. Over many years, they used the work of the RPTC as the basis for a stream of major research publications devoted to both clinical and epidemiological studies.

None of this would have been possible without the width of vision, the unfailing courtesy and the enthusiasm of Henry Matthew.

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## THROMBOLYTIC THERAPY AND THROMBECTOMY IN PHLEGMASIA CERULEA DOLENS

I read with interest the article 'Venous thromboembolism: the role of the clinician' (N Curry, D Keeling. *J R Coll Physicians Edinb* 2009; 39:243–6) and would like to give some comments.

Firstly, while this may have been beyond the scope of the article, the authors did not mention the role of thrombolytic therapy and thrombectomy in an uncommon but severe form of proximal deep vein thrombosis (DVT) known as phlegmasia cerulea dolens. Although the role of thrombolysis and thrombectomy is still controversial in most cases of DVT and despite its possible reduction in post-thrombotic syndrome, we still believe it has a role in the management of phlegmasia cerulea dolens, which is associated with a high degree of morbidity. It usually presents with sudden

severe pain and swelling, oedema, cyanosis, venous gangrene and arterial compromise, often followed by circulatory collapse. Delay in treatment can result in death or loss of limb. In this clinical scenario, routine anticoagulation is not sufficient. Systemic or catheter-directed thrombolysis with rapid removal of the thrombus, employing techniques such as aspiration thrombectomy, should be seriously considered.<sup>1–3</sup>

Secondly, in someone who has been exposed to heparin and subsequently developed a new DVT in an appropriate time frame (i.e. thrombocytopenia in days 5–10), heparin-induced thrombocytopenia and thrombosis (HITT) should be seriously considered. Heparin-induced thrombocytopenia and thrombosis is not rare since heparin has been increasingly used in both prophylactic and therapeutic situations. In DVT due to HITT, all forms of heparin must be avoided and DVT must be treated with an alternative form of anticoagulation such as lepirudin or argatroban. Warfarin should be postponed until there has been resolution of thrombocytopenia, as warfarin can make a hypercoagulable state worse.<sup>4</sup>

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## THE DEMOCRATISATION OF DIAGNOSTIC PRACTICE IS THE ROOT CAUSE OF 'SYMPTOM-ONLY' DIAGNOSIS

Giving a clinical symptom as a final diagnosis (Bhandari S. A single-centre audit of junior doctors' diagnostic activity in medical admissions. *J R Coll Physicians Edinb* 2009; 39:307–12) is part of the strategy of democratisation of ignorance, analogous to the use of 'texting' for the purpose of redressing the intellectual imbalance between those who can spell and those who cannot. Consequently, for diagnostic purposes and even for prognostic purposes, it has become increasingly acceptable to equate 'chest pain' with 'acute coronary syndrome', and vice versa – a convention reinforced by the fact that national guidelines emphasise the chest pain presentation of myocardial infarction (MI) almost to the total exclusion of the pain-free presentation.<sup>1</sup> In the MI context, one consequence of the democratic blurring of the distinction between

'symptom' and 'diagnosis' is that vulnerable MI subgroups belonging to the pain-free risk category are being consigned to benign diagnostic and therapeutic neglect.<sup>2</sup>

Most probably as a result of the fact that, in the outpatient setting, clinical examination has a lower diagnostic yield than history taking,<sup>3</sup> the evaluation of physical signs such as jugular venous pressure (JVP)<sup>4</sup> and blood pressure,<sup>5</sup> arguably the most difficult ones to elicit satisfactorily,<sup>4,5</sup> has also been overtaken, even in the acute medical admissions unit (AMU) setting, by the pervasive tide of democratisation. In particular, although raised JVP has proved to be a parameter capable of redeeming the diagnosis of congestive cardiac failure (CCF), even in the face of normal left ventricular ejection fraction (especially in the light of the prevailing semantic ambiguities in the characterisation of normal left ventricular function), its democratisation through the use of the ubiquitous formula 'JVP raised 2 cm' has undermined the distinction between the modest elevation of JVP in the majority of cases of CCF, and the extreme elevation of JVP in constrictive pericarditis and restrictive cardiomyopathy.

Equally subject to democratisation is the extremely demanding skill of auscultatory measurement of blood pressure, deemed at the Mayo Clinic to be so crucial to good clinical practice that, by 2005, it had installed, and maintained in pristine working order, 283 aneroid sphygmomanometers, instead of automated oscillometric devices, as a replacement for mercury sphygmomanometers.<sup>6</sup> A subsequent assessment of their accuracy, using as the reference standard a digital pressure and vacuum meter that was calibrated using a mercury sphygmomanometer, showed that virtually 100% of the values from the aneroid device were within the 4 mm Hg range recommended by the Association for the Advancement of Medical Instrumentation.<sup>6</sup> However, for the sake of redressing the imbalance between those who have mastered the skill of auscultatory blood pressure measurement and those who have not, automated oscillometric devices have now become the ones routinely used in many other healthcare settings for documenting the blood pressure which goes on permanent record in the medical notes, notwithstanding the fact that in a recent study, where a total of 5,070 blood pressure measurements were obtained simultaneously (Y connector) using a validated oscillometric device with Grade A status and a mercury sphygmomanometer, 15% of systolic and 6.4% of diastolic blood pressure measurements diverged by >10 mm Hg from the mercury standard.<sup>7</sup>

Also, notwithstanding the Grade A status of the oscillometric device reported in the study, the consequences of its inherent aberrations<sup>7</sup> will probably be the same as those forecast after the analysis of the performance of nine non-ambulatory oscillometric devices belonging to the Grade A to D category of the British Hypertension Society four years previously.<sup>8</sup> The prediction was that

'patients with hypertension [could] erroneously be classified as non-hypertensive and treatment withheld' and that 'in treated hypertensive patients the necessary adaptation of treatment will not take place...'.<sup>8</sup> Equally challenging is the discipline of neurological examination, which, however, has now been rendered more easily accessible through the medium of the formula 'CNS (central nervous system) grossly intact', thereby ensuring equality of documentation regardless of the degree of commitment and rigour devoted to the evaluation of that parameter.

Laboratory practice, although ranked lowest in the diagnostic hierarchy,<sup>3</sup> also has its share of democratisation, and this is exemplified by the widespread use, by clinicians, of absolute diagnostic cut-off levels in preference to the more intellectually demanding use of likelihood ratios. The use of likelihood ratios has optimised interpretation of serum ferritin in suspected iron deficiency, and the proposal for the use of the same strategy for the interpretation of D-dimer levels in suspected pulmonary embolism<sup>9</sup> would have mitigated the risk of missed diagnosis of pulmonary embolism in patients who have D-dimer levels below the so-called diagnostic cut-off level.<sup>9</sup>

In conclusion, because of its intellectually demanding dimension (deemed, by some, to be 'elitist'), diagnostic practice is, at all levels, continually under threat of having its integrity undermined by the relentless wave of democratisation that has become the defining feature of contemporary clinical practice.

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### Author's reply

It was gratifying to read the recent correspondence from Dr Jolobe regarding diagnostic practice. His comments indeed emphasise and broaden the conclusions from our study of diagnostic skills in junior doctors. I share his frustrations in clinical practice regarding assessment of relatively simple physical signs such as JVP and blood pressure (BP). It would appear that the evaluation of the JVP, which perhaps one could concede as one of the more difficult physical signs to assess, is a somewhat lost art. It is well recognised that the JVP, which serves as a manometer for the right atrium, is also a useful assessment of intravascular volume status and can potentially assist in diagnosing certain valvular heart abnormalities from its characteristic waveforms.<sup>1</sup> Time is no longer taken to correctly position the patient's head to ensure the neck muscles are relaxed and that the subject is at between 30–45° above the horizontal, to differentiate carotid pulsations and to use correct lighting to successfully view the JVP.<sup>1</sup> Indeed, few students realise the importance and value of the JVP. Important facts such as the hepatojugular reflux test graded as positive when after at least 10–15 seconds of sustained pressure there is at least a 4 cm sustained increase in the JVP are lost in the knowledge base of students.<sup>2</sup>

Again with measurement of BP, it would seem that in this era it is the norm for many staff, especially nurses and junior doctors, to use automated devices, which are potentially less reliable and accurate.<sup>3</sup> Perhaps like many of the useful skills and devices, aneroid devices are now reserved for consultants to appropriately use.

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Apologies to Dr Buchanan for not including the following response in the last issue:

### AUTHOR REPLY TO DR SYED'S LETTER

Dr Syed (Letter: Pain palliation for bone metastases. *J R Coll Physicians Edinb* 2009; 39:382) correctly identifies that there are a wide range of options for pain relief in the management of cancer-induced bone pain (CIBP), including systemic radionucleotides.<sup>1</sup> The use and recent developments of systemic radionucleotides in the treatment of bone metastases is well described in Dr Syed's letter. For the symposium considered in my article, however, Dr Edwards was specifically asked to outline new interventional techniques, in particular cementoplasty, rather than give an overview of the management of CIBP<sup>2</sup>

Dr Syed also highlights the importance of tailoring treatment according to individuals' goals and circumstances – considering pain control, time to pain control, possible toxicities, quality of life, disease extent, prognosis and choice between inpatient or outpatient treatment delivery. The availability of treatment option may vary according to local resourcing and expertise. It is of interest to note that systemic radiotracer treatments may be of particular benefit in osteoblastic metastases. The understanding of CIBP has increased greatly in the last decade since the development of new laboratory models.<sup>3</sup> Identifying specific treatments for different skeletal metastatic profiles may further allow individually tailored management in the future.<sup>4</sup> I would like to thank Dr Syed for outlining this additional mode of analgesia in the palliative setting and for further emphasising the need to treat each person individually with the most appropriate treatment.

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### ERRATUM

The number of chemotherapy cycles in the paper by J Zekri, NLC Cheah, L Evans et al. in our last issue (Serum potassium, calcium and magnesium in patients receiving ESHAP chemotherapy for relapsed

lymphomas. *J R Coll Physicians Edinb* 2009; 39:301–6) should be 43, not 40. This means serum K, Ca and Mg were measured prior to 100%, 67% and 35% of administered cycles, respectively. This mistake has been corrected in the online version of the paper.