

## Letters to the editor

OVERVIEW

Please submit letters for the editor's consideration within three weeks of receipt of *Clinical Medicine*. Letters should ideally be limited to 350 words, and sent by email to: [clinicalmedicine@rcplondon.ac.uk](mailto:clinicalmedicine@rcplondon.ac.uk)

### Non-selective $\beta$ -adrenoceptor blockers in patients with decompensated liver disease

Editor – We read with great interest the excellent article ‘Drug therapies in liver disease’ by Collins *et al* (*Clin Med* December 2013 pp 585–91). However, the section regarding the use of  $\beta$ -blockers warrants further comment.

Although the use of non-selective  $\beta$ -adrenoceptor blockers is strongly supported in the use of primary and secondary prophylaxis of variceal bleeding,<sup>1</sup> there has been some controversy with its use in patients with advanced cirrhosis. In a study by Serste *et al*,<sup>2</sup> 151 patients with Child Pugh C cirrhosis and refractory ascites were assessed. Seventy-seven patients were being treated with  $\beta$ -blockers and 74 were not. At 1 year, 19% of patients treated with  $\beta$ -blockers were alive, compared to 64% who were not ( $p < 0.0001$ ). A follow-up study by the same group found that inpatients with refractory ascites and on  $\beta$ -blockers had a higher risk of paracentesis-induced circulatory dysfunction.

Admittedly the studies have flaws and robust randomised controlled trials are needed, but clinicians should be cautious when using these drugs in patients with advanced liver disease. ■

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- 1 Tripathi D, Hayes PC. Beta-blockers in portal hypertension: new developments and controversies. *Liver Int* 2013;doi: 10.1111/liv.12360 [Epub ahead of print].
- 2 Serste T, Melot C, Francoz C *et al*. Deleterious effects of beta-blockers on survival in patients with cirrhosis and refractory ascites. *Hepatology* 2010;52:1017–22.

### A very unusual headache

Editor – ‘A very unusual headache’ (*Clin Med* February 2014 pp 58–60) is an interesting case indeed. However, the acute severe headache with nausea and vomiting is likely to be an initial presentation of migraine. There is a well described, but poorly understood, relationship between migraine and cervical

artery dissection.<sup>1</sup> There is also evidence that those with aortic root pathology in Marfan syndrome have increased risk of migraine with aura.<sup>2</sup> ■

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- 1 Rist PM, Diener HC, Kurth T, Schürks M. Migraine, migraine aura, and cervical artery dissection: a systematic review and meta-analysis. *Cephalalgia* 2011;31:886–96.
- 2 H Koppen, Vis JC, Gooiker DJ *et al*. Aortic root pathology in Marfan syndrome increases the risk of migraine with aura. *Cephalalgia* 2012;32:467–72.

### Beware the normal angiogram

Editor – Pearson and Snelson presented an interesting case of a patient with purulent pericarditis complicated by septicæmia and acute renal failure (*Clin Med* February 2014 pp 88–89). The patient presented with left-sided chest pain and shortness of breath, and underwent emergency coronary angiography in view of pathological ST elevation on electrocardiography (ECG). However, the decision to perform emergency coronary angiography before other investigations warrants scrutiny. The ECG in fact showed global ST elevation, most marked in all the V leads but subtly present in the limb leads. Global ST elevation without reciprocal ST depression should always alert clinicians to the possibility of pericarditis rather than ST elevation myocardial infarction, and the immediate investigation of choice should be echocardiography since this will determine whether there is pericardial effusion and assess whether there is any regional wall motion abnormality that would indicate an atypical ECG presentation of myocardial infarction.<sup>1</sup> Taking this approach may avoid the need for coronary angiography which carries the risks associated with X-ray contrast medium exposure. One of these risks is contrast nephropathy which can lead to acute renal failure, particularly in those with chronic kidney disease or another cause of acute kidney injury. It is likely that, in the case presented by Pearson and Snelson, the contrast medium administration contributed to the acute renal failure and may also have contributed to the haemodynamic compromise through the development of associated acidosis.

With the ready availability of emergency coronary angiography for patients with chest pain and ST elevation on ECG, the authors rightly highlight the importance of considering other diagnoses, which include stress-induced (Tako-Tsubo) cardiomyopathy, pulmonary embolism and dissection of the thoracic aorta.<sup>1</sup> Clearly it is important to perform emergency coronary angiography if there is any doubt about the diagnosis of ST elevation myocardial

infarction in order to avoid delays in reperfusion in patients with a confirmed diagnosis, but the case presented by the authors demonstrates how an alternative management may be appropriate when emergency echocardiography is available. ■

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- 1 Task Force on the management of ST-segment elevation acute myocardial infarction of the European Society of Cardiology (ESC), Steg PG, James SK, Atar D *et al.* ESC Guidelines for the management of acute myocardial infarction in patients presenting with ST-segment elevation. *Eur Heart J* 2012;33:2569–619.

## Cardiology registrars and permanent pacemaker complication rates

Editor – We read with interest the article by Leong *et al* exploring complication rates in the 12 weeks after pacemaker implantation in a UK district hospital (*Clin Med* February 2014 pp 34–7). We highlight a later complication that can occur and how to avoid it using a technique which will also be of interest to all physicians performing central venous access techniques.

In the Leong study the subclavian vein was the most frequent route utilised for venous access. As found in this study there is a small risk of pneumothorax. However, in the longer term it also conveys a small risk of a ‘crush’ injury to the pacemaker lead.<sup>1</sup> This is thought to be a result of pressure exerted between the first rib and the clavicle on the lead just before it enters the vein. The first author of this letter has experience of this complication, resulting in transection (Fig 1a and b).

A different approach utilises the axillary vein (Fig 1c). As the puncture is extra-thoracic, there is no longer a risk of crush injury and the risk of pneumothorax is reduced. A number of methods allowing access to this vessel have been described. It can be identified using ultrasound (Fig 1d) with a number of papers describing ultrasound guided insertion with up to 100% success rates, short operator learning curves and low complication rates.<sup>2,3</sup> Various fluoroscopic approaches have been described with very high success rates.<sup>4</sup>

We therefore believe that axillary venous access is safe, useful, easy to learn and therefore of use to all physicians performing central venous access techniques. ■

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- 1 Gallik DM, Ben-Zur UM, Gross JN, Furman S. Lead fracture in cephalic versus subclavian approach with transvenous implantable cardioverter defibrillator systems. *Pacing Clin Electrophysiol* 1996;19:1089–94.
- 2 Sharma A, Bodenham AR, Mallick A. Ultrasound-guided infraclavicular axillary vein cannulation for central venous access. *Br J Anaesth* 2004;93:188–92.
- 3 Sommerkamp SK1, Romaniuk VM, Witting MD *et al.* A comparison of longitudinal and transverse approaches to ultrasound-guided axillary vein cannulation. *Am J Emerg Med* 2013;31:478–81.
- 4 Antonelli D, Feldman A, Freedberg NA, Turgeman Y. Axillary vein puncture without contrast venography for pacemaker and defibrillator leads implantation. *Pacing Clin Electrophysiol* 2013;36:1107–10.

Fig 1. (a) and (b) A crush injury a number of months following insertion of a right ventricular pacemaker lead. The lead is transected (arrow). (c) Venogram showing the basilic (BV), cephalic (CV), axillary (AxV) and subclavian (SV) veins. (d) Ultrasound taken at the level shown by the arrow showing the axillary artery (AxA) and vein. The venous nature of the vessel is confirmed using colour doppler and its compressibility under pressure applied to the probe.

