

(endocarditis), periungual fibromas (tuberosa sclerosis), nail fold telangiectasia (dermatomyositis), clubbing, koilonychia (iron deficiency), and yellow nails (benign pleural effusion) to give but a few examples.

Every dermatologist has the experience of being called to the medical or surgical wards to find important physical signs in the skin that had been overlooked and which lead the correct diagnosis of a puzzling clinical presentation.

A brief but systematic examination of the skin from the top of the head (syphilitic alopecia) to the tip of the toe (subungual malignant melanoma) is, in these cost-conscious days, inexpensive but often highly rewarding. It should not be neglected. ■

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## Reference

- 1 Elder AT, McManus IC, Patrick A *et al*. The value of the physical examination in clinical practice; an international survey. *Clin Med* 2017;17:490–8.

## A 68-year-old with cranial nerve neuropathies and a troponin rise

We read with interest the case report by Bennett and Iqbal describing a patient thought to have takotsubo cardiomyopathy (TC) induced by varicella zoster viral encephalitis.<sup>1</sup> Unfortunately, cardiac magnetic resonance imaging (CMR) had not been available to the authors in the acute setting.

Have the authors considered utilising CMR for patient follow up? CMR represents the 'gold standard' imaging modality for the assessment of ventricular size and function. In addition, it would be important in this case to assess left ventricular late gadolinium enhancement (LGE).

The presence of LGE confers a poorer prognosis in both ischaemic and non-ischaemic cardiomyopathies,<sup>2</sup> and, in patients with TC, LGE is associated with an increased frequency of cardiogenic shock and increased duration to electrocardiographic normalisation.<sup>3</sup>

It would, therefore, be important to consider CMR not only for diagnostic purposes, but also as a risk-stratification tool, and to assess the patient's response to evidence-based heart failure therapy. ■

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## References

- 1 Bennett L, Iqbal J. A 68-year-old with cranial nerve neuropathies and a troponin rise. *Clin Med* 2017;17:575–7.
- 2 Kohan AA, Levy Yeyati E, De Stefano L *et al*. Usefulness of MRI in takotsubo cardiomyopathy: a review of the literature. *Cardiovasc Diagn Ther* 2014;4:138–46.

- 3 Naruse Y, Sato A, Kasahara K *et al*. The clinical impact of late gadolinium enhancement in Takotsubo cardiomyopathy: serial analysis of cardiovascular magnetic resonance images. *J Cardiovasc Magn Reson* 2011;13:67.

## Varicella zoster encephalitis, cranial nerve neuropathies, and takotsubo syndrome: delving further into the pathogenesis

Editor – I read with great interest the communication by Bennett and Iqbal,<sup>1</sup> published in *Clinical Medicine*, about the 68-year-old woman with takotsubo syndrome (TTS) secondary to a varicella zoster encephalitis (VZE), and the arduous work of the authors in diagnosing and managing her evolving cranial nerve neuropathies (initially mononeuritis and subsequently polyneuritis), associated with rapid atrial fibrillation, and cardiac abnormalities. The rise in high sensitivity troponin was higher than expected for TTS, and making the distinction between TTS and acute coronary syndromes more difficult. The QRS voltage of the electrocardiogram (ECG) of Fig 1 is low,<sup>1</sup> in keeping with TTS,<sup>2</sup> and one wonders whether prior to the admission, ECGs, or ECGs from follow-up, showed higher QRS voltages. In reference to the pathophysiology of TTS, we are still far from delineating the underlying mechanism(s), but in cases like the one herein, checking for elevated blood-borne catecholamines,<sup>3</sup> or evaluating for evidence of enhanced cardiac autonomic sympathetic nervous system (CASNS) stimulation, norepinephrine-based, exerting cardiomyocyte injury,<sup>4</sup> are two promising injurious pathways, needing exploration. Indeed, current commercially available technology<sup>5</sup> could provide monitoring of the CASNS function, via the chest electrodes used for ECG recordings, with analysis of filtered signals of 500 to 1,000 Hz from the skin of the thorax, reflecting activity of the stellate ganglia, and the sympathetic autonomic nerve input to the heart. ■

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## References

- 1 Bennett L, Iqbal J. A 68-year-old with cranial nerve neuropathies and a troponin rise. *Clin Med* 2017;17:575–7.
- 2 Madias JE. Transient attenuation of the amplitude of the QRS complexes in the diagnosis of Takotsubosyndrome. *Eur Heart J Acute Cardiovasc Care* 2014;3:28–36.
- 3 Wittstein IS, Thiemann DR, Lima JA *et al*. Neurohumoral features of myocardial stunning due to sudden emotional stress. *N Engl J Med* 2005;352:539–48.
- 4 Samuels MA. The brain-heart connection. *Circulation* 2007;116:77–84.
- 5 Madias JE. A proposal for a noninvasive monitoring of sympathetic nerve activity in patients with takotsubo syndrome. *Med Hypotheses* 2017;109:97–101.

## Consultant recognition for accepting work experience students

In order to gain entry to a UK medical school it is almost obligatory that a candidate demonstrates evidence of work experience. Many