



# Highlights from this issue

Phil E M Smith, Geraint N Fuller

A good slogan often helps to get an idea across. Politicians and advertisers love a simple phrase that captures the central idea of their manifesto or the unique selling point of their product. The same is true in medicine. The term 'evidence-based medicine'—embracing the idea that we should base our decisions on a synthesis of the available evidence—has contributed to a culture change and improvements in healthcare. And now we have 'personalised medicine' starting to drive change in a similar way. As with evidence-based medicine, the underlying idea is not new. Patients have always been individuals and clinicians have always tried to apply the most appropriate evidence from population studies to their specific care.

However, in this evidence-based medicine era, the main driver has been to develop and deliver effective guidelines for management, and these inevitably focus on how to diagnose and manage 'most patients'. This has improved outcomes, perhaps most strikingly in the outcomes for patients with strokes. But pendulums swing. Hugh Markus highlights the need for a more personalised approach to stroke, and he disentangles the elements of diagnosis and management to consider the best ways to deliver personalised stroke care (page 34), moving from the general to the particular. What is best for this patient with this type of stroke?

James Beharry and colleagues provide another example of personalised stroke management (page 80) with a patient who underwent a late thrombectomy—well beyond the interval where benefit has been shown—who had a good outcome. A single case is not evidence to change guidelines, since these must be built around a robust evidence base. However, the case made us ponder what we should do for patients who present in ways that have not been addressed in clinical trials: those situations that fall outside the evidence. Rose Bosnell discusses this further in an editorial on page 2.

Epilepsy surgery is inevitably a highly personalised form of medicine.

The approach depends on identifying the epileptic focus and determining each individual's risks and benefits from resection. Fergus Rugg-Gunn and colleagues draw on their wealth of practical experience to describe how advances in brain imaging and surgical techniques (including robotics) are offering new hope to increasing numbers of people with focal structural epilepsy (page 4). "Stable patients are all alike; every unstable patient is unstable in their own way"—to paraphrase the Anna Karenina principle.<sup>1</sup> Cristina Simonet and colleagues discuss emergency and critical issues in Parkinson's disease (page 15); when things go wrong, we need a personalised approach.

Prognostication is another particular application of personalised medicine. The patient and their family usually want to know what is going to happen to them with whatever illness they have; and they usually want something more than an 'average' range of outcomes. Intensive care is a setting where both medical colleagues and families of very sick patients often request such prognoses, and any answers will have additional significance in informing decisions about further management. While there is some evidence to help, this is mostly based on outcomes from observational cohorts, and includes many studies that predate more modern investigations and interventions. Patients in coma often have a complicated series of pathologies, which only adds to the difficulties in moving from the general to the specific patient. To help us, Eelco Wijdicks has distilled his long experience of prognosticating in coma (page 26), providing what evidence there is, and offering practical and helpful practical advice, including suggestions about how best to discuss the prognosis with the patient's family.

It goes without saying (but we write it here for emphasis) that treating patients as individuals is central to the consultation and to the provision of our patients' care. Fred Schon and colleagues (<https://pn.bmj.com/content/19/5/457.responses#clinic-letters-revisited-clinic-letters-demystified>)

advocate more personalised clinic letters by addressing these to patients rather than to fellow clinicians. Note that readers can find this and other written feedback on our papers at the bottom left of the *Practical Neurology* web page under 'responses'. Andrew Lees muses on an essential aspect of the neurological consultation, the skill of listening, and argues the importance of doing this actively and with intent (page 59). And we have several case reports that highlight specific issues with individual patients—by definition personalised medicine: identifying tuberculosis with an ophthalmoscope (page 62); understanding why central pontine myelinolysis might happen despite appropriate sodium correction (page 64); and diagnosing late-onset Friedreich's ataxia (page 55).

This focus on personalisation does not mean we have not given up on evidence-based medicine. Matthew McWilliam and Usman Khan provide a useful update on a favourite neurological drug—azathioprine (page 69). Bernadine Quirk and Steve Connor provide a richly illustrated overview of their approach skull-based imaging (page 39).

*Practical Neurology* is keen to promote debate and discussion between specialties. ENT (ear, nose and throat) colleagues, Ahmed Bayoumy and Jacob de Ru, have responded persuasively to an earlier (although not entirely serious) suggestion that 512 Hz tuning forks should be melted down and recast as 128 Hz tuning forks for testing vibration sense.<sup>2</sup> They provide a series of heated arguments, but, unlike so much of clinical neurology, none are personalised (page 66).

**Competing interests** None declared.

**Patient consent for publication** Not required.

## REFERENCES

- 1 The Anna Karenina principle. Available: [https://en.wikipedia.org/wiki/Anna\\_Karenina\\_principle](https://en.wikipedia.org/wiki/Anna_Karenina_principle) [Accessed Dec 2019].
- 2 McGurgan IJ, Nicholl DJ. Weber's and Rinne's tests: bad vibrations? *Pract Neurol* 2017;17:323–4.