

## Letters to the editor

### OVERVIEW

Please submit letters for the editor's consideration within 3 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)

### Comment on Pyrexia of unknown origin

Editor – The CME section on infectious diseases contained a most interesting article by Fernandez and Beeching on the important subject of pyrexia of unknown origin.<sup>1</sup> However, I feel that there was one important area that they failed to address, namely how temperature should actually be measured. This is especially important in identifying cases of factitious fever, a topic which they listed but did not actually address, but which may be an important feature of Munchausen's syndrome (and Munchausen's syndrome by proxy). I recall being taught as a student of the value of measuring the temperature of freshly passed urine as being a method that circumvented patient's attempts at artefactually tampering with temperature measurement, and which could also be used in restless or uncooperative individuals; but perhaps the authors might be invited to tell us how things should be done in the modern era. ■

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### References

- 1 Fernandez C, Beeching N. Pyrexia of unknown origin. *Clin Med* 2018;18:170–4.

### Response

Thank you for this interesting commentary and insight on our review. As you imply, it is essential that all investigations and clinical observations, such as measuring core temperature, are carried out in a manner that is tamper-proof. In the past it was not uncommon for patients to generate artefactually raised temperatures by placing their thermometer on the radiator, in a hot cup of tea, or under a hot tap. In most British hospitals temperatures are now measured electronically under direct observation at the same as recording other vital signs, so this reduces the risk of falsification of temperature. ■

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### Importance of CSF lactate concentration in the diagnosis of acute bacterial meningitis

Editor – We read with interest the recent *Clinical Medicine* review by Griffiths *et al*<sup>1</sup> on management of acute meningitis, but were disappointed to note that there was no reference to the importance of biochemical analysis of cerebrospinal fluid (CSF) lactate concentration in the diagnosis of acute bacterial meningitis (ABM).

A CSF lactate concentration of >3.8 mmol/L reliably discriminates between viral/aseptic meningitis and ABM,<sup>2–4</sup> and a recent UK consensus guideline on management of acute meningitis in adults recommends analysis of CSF lactate in these patients.<sup>5</sup> Co-authors of Griffiths' review paper in *Clin Med* (McGill and Solomon) were also named contributors to this guideline.

Measurement of CSF lactate is quick and inexpensive, and can be performed on the same CSF sample taken in the fluoride (grey-top) tube, which is also used to measure CSF glucose concentration.

When taken expeditiously from a patient with suspected acute meningitis prior to receipt of antimicrobial therapy, the combination of a negative CSF microscopy / Gram's stain and a CSF lactate concentration result of <3.8 mmol/L can safely allow clinicians to discontinue antibacterial meningitis treatment. This is particularly relevant in patients admitted to smaller district general hospitals, which often do not have access to on-site polymerase chain reaction (PCR) assays or virology laboratory services. ■

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### References

- 1 Griffiths M, McGill F, Solomon T. Management of acute meningitis. *Clin Med* 2018;18:164–9.
- 2 Sakushima K, Hayashino Y, Kawaguchi T, Jackson JL, Fukuhara S. Diagnostic accuracy of cerebrospinal fluid lactate for differentiating bacterial meningitis from aseptic meningitis: a meta-analysis. *J Infect* 2011;62:255–62.
- 3 Abro AH, Abdou AS, Ustadi AM *et al*. CSF lactate level: a useful diagnostic tool to differentiate acute bacterial and viral meningitis. *J Pak Med Assoc* 2009;59:508–11.
- 4 Giulieri S, Chapuis-Taillard C, Jaton K *et al*. CSF lactate for accurate diagnosis of community-acquired bacterial meningitis. *Eur J Clin Microbiol Infect Dis* 2015;34:2049–55.
- 5 McGill F, Heyderman RS, Michael BD *et al*. The UK joint specialist societies guideline on the diagnosis and management of acute meningitis and meningococcal sepsis in immunocompetent adults. *J Infect* 2016;72:405–38.