Letters to the Editor

Please submit letters for the editor's consideration within 3 weeks of receipt of *Clinical Medicine*. Letters should be limited to 350 words, and sent by email to: clinicalmedicine@rcp.ac.uk

Same-day emergency care

DOI: 10.7861/clinmed.Let.23.1.1

Editor – I enjoyed the recent article 'How do we identify acute medical admissions that are suitable for same-day emergency care'. From a secondary care perspective, it was both clear and comprehensive while acknowledging that there were unanswered questions.

A crucial issue not focused on was how to integrate these patients with primary care. Achieving this poses many challenges, not only because are there workforce issues but also because there has been a divergence away from shared decision making over many years now. One model, published in your journal, offered a partial solution.²

Algorithms and guidelines have allowed a huge amount of progress to be made. Significant challenges remain, however, if good communication, motivation and clinical judgement are not incorporated into the model. Future training of health professionals on both sides of the divide needs to focus on these qualities.

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References

- 1 Atkin C, Riley B, Sapey E. How do we identify acute medical admissions that are suitable for same day emergency care. Clin Med 2022;22:131–9.
- 2 Houghton M. Acute Medicine an alternative take. Clin Med 2011;11:26–7.

Hyperbaric oxygen therapy for the treatment of long COVID

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Editor – We raise concerns about the article by Robbins *et al* describing hyperbaric oxygen therapy (HBOT) for the treatment of long COVID.¹

The NHS commissions HBOT for treatment of decompression sickness and gas embolism at 11 facilities. The use of HBOT for these diseases has both evidence of efficacy and a plausible mechanism of action: increased ambient pressure compresses

the free gas in the patient (according to Boyle's Law) and causes it to dissolve in tissues (according to Henry's Law), while breathing 100% oxygen creates a gradient for elimination of inert gas (usually nitrogen).

A number of other hyperbaric facilities offer private HBOT for treatment of diseases for which there is neither evidence of efficacy nor a plausible hypothesis for a therapeutic mechanism. These include Alzheimer's disease, autism, cancers, depression, HIV/AIDS, Lyme disease and Parkinson's disease. Some facilities provide HBOT for multiple sclerosis although 12 randomised trials have identified no clinically significant benefit.²

This report states that 10 patients received 10 sessions of HBOT at 2.4 atmospheres. Only one author, who works at the Midlands Diving Chamber, treated the patients and he performed the preand post-treatment assessments of fatigue and cognitive scoring. The remaining 10 authors, who work at the University Hospitals Coventry and Warwickshire NHS Trust, analysed the data (which we estimate should have taken one person one day). The article reports that HBOT yielded significant improvements in fatigue scale, global cognition, executive function, attention, information processing and verbal function. The authors conclude that the results suggest potential benefits of HBOT in the treatment of long COVID.

We believe it is unacceptable that this experimental non-comparative efficacy trial had ethics approval only for the data analysis. It did not have ethics approval for the exposure of patients to the unproven use of HBOT in a clinical trial. If the patients were not told that they were participating in a research clinical trial, they did not give adequately informed consent.

HBOT involves risks of barotrauma to lungs and ears, and oxygen-induced pulmonary pneumonitis and neurological toxicity. The latter causes convulsions with the risk of aspiration for patients wearing a face mask or hood in the hyperbaric chamber.

The trial was not blinded for either patients or the treating doctor, who performed the assessment in the private facility. Whether the research was funded by the subjects paying for 'private treatment' is not stated.

Placebo effects are likely as HBOT facilities are highly technical. Patients are locked in a hyperbaric chamber and usually wear a mask or hood. They experience pressure sensations in their ears and temperature alterations as ambient pressure in the chamber changes.

The Midlands Diving Chamber now cites this paper on its website as evidence of efficacy of HBOT in long COVID to attract paying customers.³

We believe that Clinical Medicine should publish an expression of concern about this paper whilst the journal investigates whether there was ethical approval for the actual research and not just the analysis. If there was not, the article should be retracted.

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References

- 1 Robbins T, Gonevski M, Clark C et al. Hyperbaric oxygen therapy for the treatment of long COVID: early evaluation of a highly promising intervention. Clin Med 2021;21:e629–32.
- 2 Bennett M, Heard R. Hyperbaric oxygen therapy for multiple sclerosis. Neuroscience Therapeutics 2010;16:115–24.
- 3 https://oxygenhealing.co.uk/news/hyperbaric-oxygen-therapy-forthe-treatment-of-longcovid-early-evaluation-of-a-highly-promisingintervention/ [Accessed 23 November 2022].

Note from the editor

The authors have confirmed that they obtained ethical approval for this retrospective analysis from the University Hospitals Coventry & Warwickshire NHS Trust R&D Committee. The authors make clear in their paper that their findings represent only an initial evaluation with a very small sample and that further study is essential.

Fibromyalgia and attention deficit hyperactivity disorder

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Editor – We appreciate the RCP concise guideline on fibromyalgia (FMS), ¹ but are disappointed attention deficit hyperactivity disorder (ADHD) is not mentioned. Anxiety and depression are mentioned but these may be merely symptoms secondary to underlying disorders (eg post-traumatic stress disorder, ADHD, autism), and we risk oversimplifying the psychological part of the biopsychosocial model. Several studies show that ADHD (either formally diagnosed or implied by positive screening tests) is prevalent in patients with FMS: 44.7% in a South African study, ² 24.5% in an Italian study, ³ 32.3% in a Spanish study, ⁴ 25% in a study undertaken in the Netherlands, ⁵ and 29.5% in a Turkish study. ⁶ Symptoms of ADHD correlate with severity of FMS. ⁷ Bou Khalil *et al*⁸ suggest how the psychopathology of ADHD may predispose to FMS. Patients with suspected but unconfirmed FMS may be likely to have similar rates of ADHD.

As early as 1998, Krause $et~al^9$ noticed that some patients with ADHD had FMS and that treatment with stimulants could help both conditions. Despite the absence of randomised controlled trial evidence, it remains likely that treating comorbid ADHD improves quality of life, if not FMS directly. It is interesting to note 10 that methylphenidate improves tolerability of pain in ADHD (without FMS). The RCP guidelines are aimed at generalists, who are responsible for referring to mental health services: it would be important not to miss a common treatable comorbidity. FMS may also be associated with prior PTSD 11 and autism, 12 which may benefit also from specific interventions.

Physicians, and commissioners, may note that ADHD is common in other 'physical' conditions, ¹³ particularly chronic fatigue syndrome, and hypermobility spectrum disorders, which are also associated with

FMS. Further, physicians may be interested to know that ADHD is associated with autonomic dysfunction such as postural orthostatic tachycardia syndrome (POTS), functional bowel disorders, functional urinary disorders such as enuresis, migraine, and other conditions.

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Competing interests

Drs Leaver & Parry are affiliated with the UK Adult ADHD Network (UKAAN).

References

- Berwick R, Barker C, Goebel A; guideline development group. The diagnosis of fibromyalgia syndrome. Clin Med 2022;22:570–4.
- 2 van Rensburg R, Meyer HP, Hitchcock SA, Schuler CE. Screening for adult ADHD in patients with fibromyalgia syndrome. *Pain Med* 2018;19:1825–31.
- 3 Pallanti S, Porta F, Salerno L. Adult attention deficit hyperactivity disorder in patients with fibromyalgia syndrome: Assessment and disabilities. J Psychiatr Res 2021;136:537–42.
- 4 Reyero F, Ponce G, Rodriguez-Jimenez R et al. High frequency of childhood ADHD history in women with fibromyalgia. Eur Psychiatry 2011;26:482–3.
- 5 Derksen MT, Vreeling MJ, Tchetverikov I. High frequency of adult attention deficit hyperactivity disorder among fibromyalgia patients in the Netherlands: should a systematic collaboration between rheumatologists and psychiatrists be sought? Clin Exp Rheumatol 2015;33:S141.
- 6 Yılmaz E, Tamam L. Attention-deficit hyperactivity disorder and impulsivity in female patients with fibromyalgia. *Neuropsychiatr Dis Treat* 2018;14:1883–9.
- 7 Türkoğlu G. Attention-deficit hyperactivity disorder symptoms and quality of life in female patients with fibromyalgia. *Turk J Med Sci* 2021:51:1747–55.
- 8 Bou Khalil R, Khoury E, Richa S. The comorbidity of fibromyalgia syndrome and attention deficit and hyperactivity disorder from a pathogenic perspective. *Pain Med* 2018;19:1705–9.
- 9 Krause K-H, Krause J, Magyarosy I et al. Fibromyalgia syndrome and attention deficit hyperactivity disorder: is there a comorbidity and are there consequences for the therapy of fibromyalgia syndrome? J Musculoskelet Pain 1998;6:111–6.
- Treister R, Eisenberg E, Demeter N, Pud D. Alterations in pain response are partially reversed by methylphenidate (Ritalin) in adults with attention deficit hyperactivity disorder (ADHD). Pain Pract 2015;15:4–11.
- Häuser W, Galek A, Erbslöh-Möller B et al. Posttraumatic stress disorder in fibromyalgia syndrome: prevalence, temporal relationship between posttraumatic stress and fibromyalgia symptoms, and impact on clinical outcome. Pain 2013;154:1216–23.
- 12 Miyamae T, Chiba Y, Kato I, Tani Y, Yamanaka H. Neurodevelopmental disorders associated with juvenile fibromyalgia. *Pediatr Int* 2018;60:1034–5.
- 13 Instanes JT, Klungsøyr K, Halmøy A, Fasmer OB, Haavik J. Adult ADHD and comorbid somatic disease: a systematic literature review. J Atten Disord 2018;22:203–28.