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NICE cautions against using graded exercise therapy for patients recovering from covid-19

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Graded exercise therapy may not be appropriate for treating post-viral fatigue in patients recovering from covid-19, the National Institute for Health and Care Excellence (NICE) has told doctors.

In a statement NICE said that it was aware of concerns related to the impact of graded exercise therapy (GET) for managing post-viral fatigue in patients recovering from covid-19. It noted that its current advice on managing chronic fatigue may not be appropriate for this group of patients and acknowledged that it could also be out of date for other groups.¹

“NICE’s guideline on ME/CFS [chronic fatigue syndrome] (CG53) was published in 2007,² many years before the current pandemic, and it should not be assumed that the recommendations apply to people with fatigue following covid-19,” the statement said.

It emphasised that the recommendations on GET in this guideline applied only to patients with a diagnosis of chronic fatigue syndrome as part of specialist care, where it should be part of an individualised, person centred programme of care, where GET is recommended only for people with mild to moderate symptoms.

NICE added, “As the guideline is currently being updated, it is possible that these recommendations may change. The evidence for and against graded exercise therapy is one of the important issues the guideline committee is considering.”

NICE plans to consult on its updated guidance in November 2020. In the interim it has told doctors to use recent guidance from NHS England on the aftercare needs of inpatients recovering from covid-19, which includes advice on managing fatigue.³ That guidance says that “it is important to ensure a gradual return to activities and exercise and to teach pacing methods.”

Much of the support for GET comes from a study published in the *Lancet* in 2011, which concluded that patients with chronic fatigue syndrome benefited more from cognitive behavioural therapy and GET than from pacing therapy.⁴ Many patients reported that GET made them feel worse and that pacing was more effective,⁵ and the study’s methodology was heavily criticised.⁶ A review conducted by the Health Research Authority concluded that the study was properly conducted,⁷ but the review focused on the research process, not the conclusions.

Post-exertional malaise

The large number of patients experiencing post-viral fatigue after covid-19 has now shone a spotlight on the controversial technique again.

Among this number is Paul Garner, professor of infectious disease at the Liverpool School of Tropical Medicine and director of the Centre for Evidence Synthesis in Global Health. Early in his recovery Garner realised that he was experiencing post-exertional malaise, as every time he did any exercise that increased his heart rate, such as cycling or yoga, he found himself back in bed.^{8 9}

Garner, who is coordinating editor of the Cochrane Infectious Diseases Group and one of the founders of the Cochrane Collaboration, said that he was “furious” when he read the 2007 NICE advice and the conclusions of the Cochrane review, which also support exercise therapy and mention uncertainty about the side effects of adaptive pacing.¹⁰

“Obviously, I know that if I increase my exercise I will be thrown back to bed,” he said. “What I struggle with as a highly driven medic is stopping myself overdoing it. That’s what I need help with—I don’t need help to increase my exercise.”

Garner researched and started using pacing, finding the approach helpful. However, he emphasised that the technique was complex and that there was very little information in the medical literature. “GPs need some really practical guidance on how they rehabilitate these patients. People are having to search out techniques or generate them themselves,” he said.

He added that, while some charities and health authorities had put out guidance, it was “difficult to negotiate” and that a centralised approach coordinated by NICE or the Royal College of General Practitioners, involving medical professionals and patients, was needed quickly.

1 National Institute for Health and Care Excellence. Statement about graded exercise therapy in the context of COVID-19. Jul 2020. <https://www.nice.org.uk/guidance/gid-ng10091/documents/interim-findings-2>.

2 National Institute for Health and Care Excellence. Chronic fatigue syndrome/myalgic encephalomyelitis (or encephalopathy): diagnosis and management. Clinical guideline [CG53]. 22 Aug 2007. <https://www.nice.org.uk/Guidance/CG53>.

- 3 NHS England. After-care needs of inpatients recovering from COVID-19. Jun 2020. <https://www.england.nhs.uk/coronavirus/publication/after-care-needs-of-inpatients-recovering-from-covid-19/>.
- 4 White PD, Goldsmith KA, Johnson AL, et al PACE trial management group. Comparison of adaptive pacing therapy, cognitive behaviour therapy, graded exercise therapy, and specialist medical care for chronic fatigue syndrome (PACE): a randomised trial. *Lancet* 2011;377:823-36. doi: 10.1016/S0140-6736(11)60096-2 pmid: 21334061
- 5 ME Association. Response to PACE trial recovery paper. 15 Feb 2013. www.meassociation.org.uk/2013/02/me-association-response-to-pace-trial-recovery-paper-15-february-2013.
- 6 Torjesen I. Tackling fears about exercise is important for ME treatment, analysis indicates. *BMJ* 2015;350:h227. doi: 10.1136/bmj.h227 pmid: 25589087
- 7 Hawkes N. PACE chronic fatigue trial was properly conducted, says UK research watchdog. *BMJ* 2019;364:l639. doi: 10.1136/bmj.l639 pmid: 30733199
- 8 Garner P. Paul Garner: Covid-19 and fatigue—a game of snakes and ladders. *BMJ Opinion* 2020 May 19.
- 9 Garner P. Paul Garner: Covid-19 at 14 weeks—phantom speed cameras, unknown limits, and harsh penalties. *BMJ Opinion* 2020 Jun 23.
- 10 Larun L, Brurberg KG, Odgaard-Jensen J, Price JR. Exercise therapy for chronic fatigue syndrome. *Cochrane Database Syst Rev* 2019;10. <https://pubmed.ncbi.nlm.nih.gov/31577366/>. pmid: 31577366

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