

Anaemia and iron deficiency in relation to fatigue in cystic fibrosis

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Dear Editor,

We welcomed Nap-van der Vlist and colleagues’ recent paper on severe fatigue in people with cystic fibrosis (CF).¹ Their study corroborates the work of previous investigators to highlight fatigue as a significant cause of morbidity in CF which is often neglected over pulmonary and gastrointestinal manifestations of the condition.

We feel, however, that the authors have not accounted for common and potentially treatable causes of fatigue in CF, namely anaemia and iron deficiency. Iron deficiency has been shown repeatedly to be very common in CF, affecting up to 74% of adults, with anaemia seen in as many as 29%.^{2,3} Although Jarad and colleagues found no statistical correlation between fatigue and haemoglobin levels, their data were drawn from a small, single-centre cohort of only 44 patients and no information on iron status was provided.⁴

Identification and correction of iron deficiency in CF is a challenge. Gifford and colleagues found no benefit in haemoglobin levels following six weeks of oral iron supplementation in adults with CF.⁵ Hoo and Wildman have previously raised concerns over the safety of intravenous iron therapy in CF having reported a high rate of clinical deterioration following IV iron infusion in a small case series of five patients.⁶ Conversely, however, correction of iron deficiency using intravenous iron has been shown to improve fatigue and exercise tolerance in a variety of other chronic conditions such as

1 heart failure and rheumatoid arthritis,⁷ even in the absence of anaemia, with no safety signal seen in
2 randomised controlled trials of IV iron in the setting of critical illness.^{8,9}
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5 It would be of great interest to interpret the rates of fatigue seen in the study by Nap-van der Vlist
6 and colleagues with the addition of data on iron deficiency and anaemia. There is a clear need for
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8 prospective studies of intravenous iron therapy in people with CF, which has the potential to have a
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10 significant impact on the wellbeing and fatigue levels in this group.
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19 **Conflict of Interest Statement:** The authors have no conflict of interest to declare related to this
20 manuscript.
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