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Letters to the editor

Considering the impact of patient ethnicity on cystic fibrosis related bone disease

Dear editor,

We found the article "Bone accrual and structural changes over one year in youth with cystic fibrosis" by Rosara M.Bass et al [1] to be of great interest. The study investigated bone changes over one year in individuals aged 5–18 with both cystic fibrosis (CF). The aim of this was to see how much bone development in youth and emerging adults contributes to cystic fibrosis related bone disease (CFBD).

The study accounted for the following patient demographics: weight, height, age, pubertal status, and gender [1]. Although these are important factors, we believe it is important to consider the impact of patient ethnicity on the development of structural changes in the bone.

Several studies across western countries have found that vitamin D deficiencies are more prevalent in ethnic minority groups, including South Asian and Black African-Caribbean populations [2,3]. This is thought to be due to skin pigmentation being a factor which impacts the levels of vitamin D produced in the skin after sun exposure [2]. Furthermore, vitamin D deficiency is also the most recognised cause of CFBD [4]. Therefore, it is important to recognise the potential impact of ethnicity on changes in bone development in patients with CF.

Additionally, it is important to note that studies have demonstrated that CF patients from ethnic minority backgrounds are more likely to experience worse outcomes compared to white patients [5]. For example, a study in the United States found that Hispanic and Black patients with CF had worse respiratory function compared to white patients [5].

We therefore propose that future studies should include ethnicity as a patient demographic. Further research into the impact of ethnicity on CFBD will enable a more inclusive and holistic approach towards diagnosis and treatment of CF.

Author contributions

All authors made an equal contribution to the final piece, both during analysis of the original document and writing the final response. All authors have read and revised the final piece. All authors accept full responsibility for the produced document.

Declaration of Competing Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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