

Enhancing the Predictive Utility of MHR for Senile Osteoporosis: Unaddressed Considerations and Future Directions [Response to Letter]

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Dear editor

First, we would like to express our gratitude to Dou et al for their attention to our research work.^{1,2} In clinical practice, we have observed that osteoporosis is a prevalent condition among the elderly, which can result in severe complications such as fractures. However, it is evident that many elderly individuals do not adequately recognize the significance of this disease. Many individuals fail to undergo standardized bone mineral density examinations due to concerns over cost, radiation exposure from imaging equipment, and other factors, thereby delaying the early detection of the disease. Consequently, there is a need to identify a biomarker that correlates with osteoporosis and can serve as an early warning indicator for the condition. As we have noted, such metrics would be valuable if they could be readily accessed without imposing an additional healthcare burden on patients. Therefore, we conducted a retrospective study to identify suitable indicators from patients' previously conducted tests. Statistical analysis revealed that MHR possesses these characteristics. This test, which requires only peripheral blood, is routinely performed for most patients. Therefore, we conducted a retrospective study to identify suitable indicators from patients' previously conducted tests. Statistical analysis revealed that MHR possesses these characteristics. This test, which requires only peripheral blood, is routinely performed for most patients. While it holds potential value as an early warning indicator for diseases, the definitive diagnosis of osteoporosis remains dependent on standard bone mineral density testing.

Of course, our study is also limited by the fact that it is a retrospective study, which limits the predictive utility of our research findings. There are many aspects that need to be further improved and supplemented. Dou et al provide us with good suggestions in their paper. For example, we will add vitamin D and CRP testing, as well as lifestyle factors such as physical activity, in our future prospective studies to further enhance the utility of our results or find more valuable multidimensional models. Our study only collected data from one hospital, which indeed has significant limitations, and we mentioned this in the paper.

With the arrival of an aging society, there are more and more elderly people. However, there are very few studies on elderly people over 90 years old. In our study, we focused on these elderly people and divided the participants into groups according to age, analyzing the correlation between MHR and bone density in different age groups, but there are still areas that need improvement. Dou et al provided us with good advice by stratifying the analysis by frailty index, which can reduce the limitations of the study.

In conclusion, our study offers valuable insights into identifying predictors of osteoporosis in the elderly. Further multicenter and more rigorous prospective studies are necessary to strengthen the clinical applicability and relevance of our findings.

Disclosure

The authors declare no conflicts of interest that pertain to this communication.

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