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LETTER TO THE EDITOR

Response to the letter entitled "Diagnostic value of serum connective tissue growth factor in rheumatoid arthritis: Methodological Issues" by Ghjari et al.

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We thank Hadis Ghajari and his colleague for their interest and comments about the methodology of our study [1]. We would like to answer the questions mentioned in the letter.

First of all, for the diagnosis of RA patients, rheumatoid factor (RF) and anti-CCP antibodies are important biomarkers, so we included these two markers in our study. The results showed that in the patients without anti-CCP antibody or RF, the positivity of serum CTGF was 15.0% (9/60) and 16.3% (13/80), respectively. In those patients with both negative anti-CCP antibody and RF, the positivity of CTGF was 13.0% (7/54), which indicates that serum CTGF has added value for the diagnosis of seronegative RA patients.

Secondly, we agreed the suggestion that the positive and negative likelihood ratios (LR) should be calculated, since they are not influenced by prevalence of RA. In our study, the positive LR and negative LR are 9.82 and 0.68, respectively. However, besides these two indexes, area under the curve (AUC) of receiver operating characteristic (ROC) is another index not influenced by prevalence of RA. The AUC was 0.717 (95% CI 0.651–0.784) in our study, which suggest the diagnosis is good [2]. In short, although serum CTGF is not a perfect diagnostic marker for RA, it has certain value for the diagnosis of RA.

Thirdly, we agree that it is essential to evaluate the reliability of the diagnosis test. In the classical diagnosis test, the index should be tested in different cohort, and kappa statistic and intra-class correlation coefficient should be calculated to assess the reliability. As we detect the concentrations of serum CTGF only in one cohort, we could not valuate the reliability. Detections of serum CTGF in different cohorts should be performed in further study.

Fourthly, in our study, we enrolled patients with RA as experimental group, and patients with other rheumatic diseases, including systemic lupus erythematosus, osteoarthritis, primary Sjögren's syndrome, ankylosing spondylitis, psoriatic arthritis, reactive arthritis, systemic sclerosis, systemic vasculitis who could have symptoms as arthralgia which would be misdiagnosed with RA, and healthy individuals as control groups. Besides, people who have arthralgia or arthritis but cannot be diagnosed as any diseases should also be included; otherwise, as Hadis Ghajari mentioned in the letter, the selection of study subjects will lead to biased estimates of the test's performance. This is one of the defects in our study, which need to be improved in further study.

Above all, our study is a preliminary study to investigate the prevalence of serum CTGF and the association with the clinical features in RA patients; some improvements as mentioned above and in original paper should be made in further study to achieve more accurate diagnostic performance of serum CTGF for RA patients.

Declarations

Disclosures None.

References

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