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MR enterography: Still complementary to SES-CD for evaluation of ileal Crohn's disease

To the Editor,

I read with great interest the article by Sarıtaş Yüksel et al. (1), in which the authors assess the sensitivity of magnetic resonance enterography (MRE) in the evaluation of Crohn's disease (CD) activity and the correlation between simplified endoscopic scoring of CD (SES-CD) and MRE scores in predicting the activity grade. They reported that the success rate of MRE for demonstrating the presence of activation and correct grade of activity was 92% and 64%, respectively.

Magnetic resonance enterography is a radiologic technique that helps in diagnosing the disease, provides information about the extent and behavior of disease, detects associated complications, aids in deciding the optimal management, and is an important diagnostic tool in monitoring treatment response (2).

The derivation and validation of segmental and global disease activity scores that entail MRI features are the innovative area of CD imaging and techniques, such as diffusion-weighted imaging, magnetization transfer, and motility studies, which are the main focused techniques of investigation. The change of the concept "target to heal" from achieving mucosal healing to achieving full mural healing and future years will likely see MRI activity scores at least complementing and potentially replacing conventional clinical and endoscopic indexes for CD management (3).

Many MRI features, either alone or together in varying combinations, have been studied as markers of disease activity. The main limitation in the reports is the distinct interobserver variability for many of these MRI features. Additionally, the interobserver reproducibility of MRI features in CD must be optimal when used by different observers in different centers to be clinically useful (4). The validation and standardization of MRI scoring systems need optimal interobserver variability and reproducibility values.

In summary, I think that in addition to the correlation of MRE with the endoscopic scoring system, the interobserver variability and reproducibility values of MRE features taken for assessment of MRE scoring system in ileal CD evaluation should be given in detail in the article in order to improve the quality of the paper.

Conflict of Interest: No conflict of interest was declared by the authors.

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Author's Reply

To the Editor,

Your comments are appreciated, and focus on one of the problematic issues in the radiological evaluation of Crohn's disease (CD). However our research does not

target to assess the interobserver variability and reproducibility values of magnetic resonance enterogpraphy (MRE) imaging of CD patients.

Image analysis was performed by two radiologists (GK was the senior radiologist and OA was the consultant professor) in consensus. All the patients were with an established diagnosis of CD and the radiologists were not blind to the established diagnosis. Instead they were blind to the endoscopic activity scores.

In conclusion aiming the assessment of interobserver variability is beyond the scope of our research. We affirm that MRE is a supplementary technique rather than a main diagnostic and scoring tool due to our finding which is MRE underestimates CD activation scores and due to the findings of other studies (1-4) declaring that it has inter- and intra-observer variability.

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