LETTER TO THE EDITOR

Reply to Dr. Papamichael et al.’s letter

Dear Sir,

We thank Dr. Papamichael and colleagues for taking an interest in our work. We agree that fecal calprotectin (FC) is an accurate surrogate marker of endoscopic activity both in Crohn’s disease (CD)\(^1,2\) and ulcerative colitis (UC).\(^1,2\) However, data on its usefulness to predict postoperative endoscopic recurrence (PER) in CD patients are more scarce.\(^1,4\) Since PER is one of the main indications for colonoscopy, it is of great value in the identification of high-risk patients in order to prioritize or eventually avoid the colonoscopy in these individuals.

Dr Papamichael et al.\(^4\) measured FC with a rapid semi-quantitative test (RSQT) that identified all the patients (15) with PER in their population (defined as Rutgeerts’ score \(\geq 2\)) by using the 60 \(\mu g/g\) cut-off value given by the RSQT. In our study\(^1\) we used a rapid quantitative test (RQT) and observed that a 203 \(\mu g/g\) cut-off level had 75% sensitivity and a 72% specificity to predict PER with the same definition. When using a 60 \(\mu g/g\) cut-off level in our population we also found a 100% sensitivity to predict PER, although specificity is then lower (58%) (Fig. 1).

Since there is no established cut-off level to predict endoscopic activity, we consider it more appropriate to use a quantitative test. On one hand, a quantitative result allows to choose the optimal cut-off level according to the clinical context. On the other hand, it provides us with an accurate follow-up of the biological activity of the patient. Like the variation of C-reactive protein, the variation in FC levels along time is more informative than a FC isolated value in the patient’s follow-up.

Most of the previous studies that measured FC have been done with an enzyme-linked immunoassay test (ELISA). The main advantages of the rapid tests in comparison to ELISA are that they are quicker and easier to use and can be used individually. To date, no other studies using a rapid test to predict PER have been published.

In conclusion, the study of Papamichael supports our results, which show that FC is a more accurate marker of PER than clinical activity or CRP, although with different cut-off levels in both studies. More studies with FC are needed to establish the most accurate cut-off level for PER. Lastly, the most appropriated moment to measure FC should also be studied in prospective cohorts, being that in the postoperative setting there are inflammatory conditions related to the surgery which may result from a false positive FC test for disease activity.

References


Triana Lobatón*
Francisco Rodríguez-Moranta
Jordi Guardiola
Department of Gastroenterology, Bellvitge University Hospital, Hospital de Llobregat, Barcelona, Spain
*Corresponding author.
E-mail address: tlobaton@bellvitgehospital.cat
(T. Lobatón)
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Figure 1  FC levels according to Rutgeerts' score.