The Neutrophil Respiratory Burst and Bacterial Digestion in Crohn's Disease

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Dear Sir,

I read with great interest the recent article by Hayee et al. [1], which has very important outcomes related to neutrophil burst in Crohn's disease (CD). However, there is an item to be clarified. The author's aim in the study was based on the conflicting results of previous studies on neutrophil burst in CD. They highlighted the impaired clearance of bacteria seen in patients with CD and they explained this via attenuated neutrophil influx and reduced neutrophil count rather than a function. The issue of my concern is the patients' disease activity. It was reported that the patients in that study were relatively stable with low inflammatory status and normal C-reactive protein (CRP) levels. However, enhanced inflammatory and oxidative stress and a decreased antioxidant status were shown in patients with active CD. As the patients improve and become clinically

stable, the oxidative parameters decrease, approaching normal values [2]. This is why it is not easy to conclude "reduced neutrophil count rather than a function" with these study patients.

References

1. Hayee B, Rahman FZ, Tempero J, McCartney S, Bloom SL, Segal AW, Smith AM. The neutrophil respiratory burst and bacterial digestion in Crohn's disease. *Dig Dis Sci*. doi:[10.1007/s10620-010-1426-8](https://doi.org/10.1007/s10620-010-1426-8).
2. Maor I, Rainis T, Lanir A, Lavy A. Oxidative stress, inflammation and neutrophil superoxide release in patients with Crohn's disease: distinction between active and non-active disease. *Dig Dis Sci*. 2008;53(8):2208–2214.

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