HIGH NEUTROPHIL MYELOPEROXIDASE ACTIVITY IN SMOKERS

To the Editor:

Gulley et al. recently reported increased neutrophil myeloperoxidase (MPO) activity in megaloblastic anemia of both masked as well as with macrocytosis. With these observations they suggested that neutrophil MPO was a parameter to identify masked megaloblastic anemia. Similar results were reported by Debauche as early as 1978 showing increased MPO activity in vitamin B12 deficiency. He also observed that the increase in MPO preceded the development of macrocytosis in megaloblastic anemia, thus suggesting that the threshold for the development of macrocytosis is higher than that for the development of increased MPO activity.

We studied neutrophil MPO activity using the method of Herzog and Fahimi and neutrophil MPO scoring by the method of Kaplow in 40 chronic smokers (blood COHb 11.79% ± 5.6%) and 20 nonsmokers (blood COHb 5.0% ± 1.9%). There was a significant difference (P < .005) between the MPO levels in chronic smokers at 0.754 ± 0.380 U/mL and those in nonsmokers at 0.265 ± 0.129 U/mL. The MPO scores were 240.75 ± 33.50 in the smokers versus 117.55 ± 33.50 in nonsmokers. Similar data were also published by Bridges et al.

Because smoking is highly common among the general population in the United States, we suggest that the values of MPO should be analyzed with the knowledge of smoking habit of the patient.

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REFERENCES

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