

Complete blood cell count

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TO THE EDITOR: The review by May et al¹ of 3 neglected numbers in the complete blood cell count (CBC) was a good reminder to look more closely at the results of the CBCs we often order in primary care. I was surprised to see no mention of the red cell distribution width in relation to another cardiovascular disorder—obstructive sleep apnea.^{2,3} I wonder if the authors would comment on this association?

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IN REPLY: We thank Dr. Homler for his question and for highlighting another important disease state, obstructive sleep apnea, in which a high red cell distribution width (RDW) has correlated with disease severity.^{1,2} The 2 retrospective studies he mentioned indicated that RDW is negatively correlated with metrics such as oxygen saturation, sleep time, and sleep quality. Interestingly, another retrospective study showed that RDW was significantly higher in patients with concurrent obstructive sleep apnea and cardiovascular disease than in patients with obstructive sleep apnea alone, suggesting that the presence of anisocytosis in obstructive sleep apnea may be due to its link to cardiovascular disease.³

Although we focused on cardiovascular disease in our review, RDW has also shown prognostic significance in many other disorders including ischemic stroke,⁴ pneumonia,^{5,6}

chronic kidney disease,⁷ and gastrointestinal disorders.⁸ Collectively, these studies indicate that RDW may serve as a red flag for clinicians, raising concern for increased disease severity and potential adverse outcomes. However, further research is needed to determine if and how RDW monitoring should be used to prompt interventions to improve patient outcomes.

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