To the Editor:

The molecular interactions leading to heparin-induced thrombocytopenia (HIT) have at last become clearer with the demonstration that platelet factor 4 (PF4) is an essential part of the complex that assembles on the platelet surface. Kelton et al. have recently contributed compelling evidence in support of this model. Now we would like to report an additional bit of data that confirms the importance of PF4 in the pathogenesis of HIT.

We have had the opportunity to perform the \( ^{3}H \)-serotonin release assay for HIT using purified IgG (3 mg/mL) from a well-documented case and platelets from a patient with the gray-platelet syndrome whose platelets lack alpha granules and are devoid of PF4. In the absence of PF4, insignificant \( ^{3}H \)-serotonin release occurred with both low (0.1 U/mL) and high (100 U/mL) concentrations of heparin (Fig 1). However, release increased in a dose-dependent manner as purified PF4 was added in the presence of a low concentration of heparin, but not in the presence of a high concentration.

Although the lack of response of gray platelets in this assay has previously been reported, we believe we are the first to show that responsiveness can be produced by the addition of PF4. Therefore, our observation confirms that it is the lack of PF4 and not some other abnormality of gray platelets that accounts for their behavior in the \( ^{3}H \)-serotonin release assay for HIT.

McDonald K. Horne III
Brenda R. Alkins
Hematology Section
Clinical Pathology Department
Warren G. Magnuson Clinical Center
National Institutes of Health
Bethesda, MD

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Importance of PF4 in heparin-induced thrombocytopenia: confirmation with gray platelets [letter]

MK 3rd Horne and BR Alkins