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## **Detection of activated platelets in dogs with primary immune-mediated hemolytic anemia.**

Weiss DJ, Brazzell JL.

### **Source**

Department of Veterinary Biomedical Sciences, University of Minnesota, St Paul 55108, USA.  
weiss005@umn.edu

### **Abstract**

Thromboembolism is a major cause of morbidity and mortality in dogs with immune-mediated hemolytic anemia (IMHA). To the authors' knowledge, the role of platelets in thromboembolic events associated with IMHA has not been extensively investigated. In the study reported here, we evaluated cell membrane expression of P-selectin with flow cytometry to determine whether platelets circulate in an activated state in association with primary IMHA. Median P-selectin expression for 20 dogs with primary IMHA was 8.1-fold greater, compared with values for 20 healthy dogs. Fifteen of 20 dogs (75%) with IMHA had P-selectin median fluorescence intensity (MFI) values that exceeded the reference interval for healthy dogs. Additionally, P-selectin MFI after activation of platelets with phorbol myristate acetate was 2.1-fold greater for dogs with IMHA than for healthy control dogs. Despite treatment of all dogs with immunosuppressive therapy and 18 dogs with subcutaneously administered low-dose unfractionated heparin, 7 dogs developed clinical signs consistent with thromboembolism. These data provide support for the hypothesis that platelets circulate in an activated state in many dogs with IMHA.

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