

# ADAMTS13 activity in dogs with presumptive idiopathic immune thrombocytopenia

## Purpose

To evaluate the role of ADAMTS13, an enzyme related to blood clotting, in dogs with presumptive idiopathic immune thrombocytopenia

## Background

Immune thrombocytopenia results in low platelet numbers, which often predisposes affected individuals to excessive bleeding. In humans, immune thrombocytopenia can be difficult to tell apart from immune thrombotic thrombocytopenic purpura, since both conditions result in low platelet numbers and may cause excessive bleeding. Reduced activity of ADAMTS13 is the underlying cause of immune thrombotic thrombocytopenic purpura. The primary aim of this study is to determine whether a portion of dogs with presumptive idiopathic immune thrombocytopenia have reduced ADAMTS13 activity, which may represent a disease process similar to immune thrombotic thrombocytopenic purpura in people.

## Eligibility

- Dogs of any age or sex
- Dogs diagnosed with severe thrombocytopenia (platelet count  $<20,000/\mu\text{l}$ ) and a presumptive diagnosis of idiopathic immune thrombocytopenia based on extensive diagnostic testing, including a complete history, physical examination, complete blood cell count, blood smear, serum biochemistry, urinalysis, 3-view thoracic radiographs, abdominal ultrasound, and Snap 4Dx testing

## Exclusion Criteria

- Dogs with other causes of thrombocytopenia
- Dogs with concurrent systemic illness, including dogs who have been previously diagnosed with a condition known to alter hemostasis, such as von Willebrand disease, hemophilia, diabetes mellitus, hyperadrenocorticism, kidney disease, malignant neoplasia, hepatic disease, or pancreatitis
- Dogs receiving medications known to alter hemostasis, including dogs who have received corticosteroids or other immunosuppressants  $>24$  hours prior to presentation
- Dogs who have received blood products over the last 7 days

## Study Design

Dogs undergoing routine evaluation for immune thrombocytopenia (abdominal ultrasound, chest x-rays, complete blood cell count, and urinalysis) will be evaluated in this study. Your dog will not receive these tests solely for the purpose of this study, but as part of a routine clinical work-up by the Veterinary Teaching Hospital.

As part of the study, we will collect an extra blood sample, beyond what is typically needed as part of routine clinical care, and a bleeding score assessment will be performed. All other procedures undertaken are part of the routine clinical assessment and care of dogs with immune thrombocytopenia.

## Compensation

For participating dogs, the cost of an exam, urinalysis, abdominal ultrasound, chest x-rays, and complete blood cell count will be covered. Since these tests are part of the routine evaluation of dogs with immune thrombocytopenia, this will represent a significant cost savings off your dog's visit. The cost of the blood tests on the study-specific sample are covered.

## Contact

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If your query is urgent, please call the Small Animal Hospital on (540) 231-4621.