

# Thrombocytopenia

## ***What is thrombocytopenia?***

Thrombocytopenia is a term that refers to a decrease in the number of thrombocytes or blood platelets circulating in the blood.

## ***What are “platelets”?***

Platelets are fragments of the cytoplasm of cells called *megakaryocytes* that are produced in the bone marrow. Platelets are an important factor in the blood clotting mechanism, so thrombocytopenia can lead to spontaneous bleeding due to improper and incomplete clotting.

## ***What causes thrombocytopenia?***

Any severe or prolonged blood loss, increased internal destruction of platelets, or impaired bone marrow production can lead to acute (short-term) or chronic (long-term) deficiency of platelets.

## ***What diseases or conditions are associated with thrombocytopenia?***

Many diseases have thrombocytopenia as one component of the condition. For example, certain infections, neoplasia or cancer, immune system disorders, and various drug therapies such as anti-cancer treatments can result in decreased platelets. Platelet counts of less than 20,000 to 30,000 per uL of blood make spontaneous hemorrhage likely.

## ***How common is thrombocytopenia?***

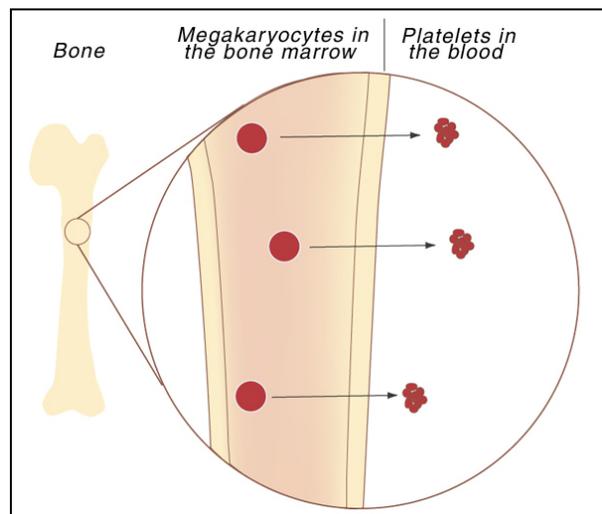
Thrombocytopenia is quite common. Some surveys have shown as many as 1% of cats admitted to veterinary hospitals are platelet-deficient.

## ***How is thrombocytopenia diagnosed?***

A blood test is used to diagnose thrombocytopenia. Additional diagnostic tests are used to investigate the underlying causes of the problem.

## ***What treatments are used?***

If the blood loss has been acute or sudden a blood transfusion may be required. Usually, other therapeutic treatments will be aimed at the underlying causes of the problem.



***Can there be bleeding disorders with normal numbers of platelets?***

Yes, this can happen if platelet function is impaired. Some drugs, including antibiotics, can impair platelet function. Cats can be affected by inherited platelet defects. One of the best recognized inherited condition is *von Willebrand's Disease* (see separate topic), although this disease is rare in cats. Another example is Chediak-Higashi syndrome, a condition identified by partial albinism (lightly colored iris of the eye), and seen in some lines of Persians and other breeds. Diagnosis requires tests of platelet function. There are no specific treatments other than transfusions as needed.

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*This client information sheet is based on material written by Ernest Ward, DVM  
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