



IMMUNE-MEDIATED THROMBOCYTOPENIA

ABOUT THE DISEASE

Thrombocytes, commonly called platelets, are responsible for creating clots to treat or prevent bleeding when injury occurs. Thrombocytopenia is a general term used when a patient has a lower number of platelets in the bloodstream.

Immune-mediated thrombocytopenia (IMTP/ITP) is a disease where the body's own immune system destroys the platelets. When this occurs, normal bumps and bruises can overwhelm the already dangerously low platelet level. Small blood vessels can spontaneously leak blood leading to significant blood loss.

This immune destruction is classified into two categories:

- Primary – no identifiable cause (genetic, spontaneous, etc.)
- Secondary – caused by some other factor (infectious disease, cancer, vaccines, medications, etc.)

Signs are often vague until patients start to spontaneously bleed. Some symptoms may include weakness, bruising, small red circles on the skin (petechia/ecchymosis), visible hemorrhage (mouth, nose, in feces, vomit, or urine), respiratory difficulty, weakness, collapse, and/or death.

OBTAINING A DIAGNOSIS

A simple blood count can identify a reduction in platelets but is often verified with a microscopic evaluation (blood smear).

As some infectious diseases can destroy platelets, some patients will have infectious disease panels (tick-borne, etc.) performed to rule out imposter syndromes.

Commonly in geriatric patients, diagnostics are focused on identifying cancerous diseases.

TREATMENT

The goal of all **IMTP/ITP** therapy is to suppress the immune system's destruction of platelets.

If a secondary disease is identified, then it is treated along with management for **IMTP/ITP**.

All patients are managed with glucocorticoids (steroids) to suppress the immune system. In more severe cases, patients may have other immune medications added such as azathioprim, cyclosporine, or cyclophosphamide.

There is no effective means to transfuse a sustainable level of blood platelets.

TIPS FOR SUCCESS

- Even if the patient appears well enough, do not allow them to return to normal activity until the blood tests show normal/adequate levels of platelets.
 - Even minor trauma (bumps, play trauma, chew injuries, etc.) can cause severe bleeding.
- Give medications exactly as directed and do not alter the dose of medications without explicit instructions.
 - If there is concern about negative drug effects, contact a veterinarian, and do not abruptly stop medications.
- Even once in remission, this disease can recur spontaneously so be sure to observe closely for symptoms.