

## Thrombocytosis

Thrombocytosis is an elevated platelet count. Platelets are microscopic particles in the blood that are necessary for normal blood clotting. A normal platelet count is 150,000- 450,000/mm<sup>3</sup>. They are produced in the bone marrow. Essential thrombocytosis (ET, aka, thrombocythemia) is overproduction of platelets by the bone marrow in the absence of another identifiable cause. Reactive thrombocytosis and other primary hematological disorders must be ruled out before the diagnosis is made because elevated platelet counts can be a sign of serious underlying illness such as polycythemia vera, myelofibrosis, myelodysplasia, leukemia, other malignancies, and bone marrow diseases. Platelets counts can be expected to rise with acute hemorrhage and after the spleen has been removed. ET is usually asymptomatic, even when platelets counts are very high (>1million), but on occasion, it is associated with a thromboembolic event (*such as clots, MI, TIA/stroke*) or abnormal bleeding. Lesser problems include migraines, erythromelalgia (pain and redness), burning sensation, and acrocyanosis. Appropriate work-up includes bone marrow biopsy and aspiration, iron studies, leukocyte alkaline phosphatase, and molecular studies for BCR-ABL. Treatment with aspirin is common, especially to relieve symptoms of erythromelalgia and burning sensation, but it can increase the risk of hemorrhage. Severe cases require other treatment choices as hydroxyurea, interferon alpha and others. Platelet counts can rise in reaction to some other conditions (*as stated above*). Their risk must be assessed in the context of the underlying condition.

If your client has a history of Thrombocytosis, please answer the following:

**1. When was Thrombocytosis diagnosed:**

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**2. What were the bone marrow results?**

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**3. How is it being treated?**

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**4. Date and results of the most recent CBC:**

Hemoglobin (Hb) \_\_\_\_\_

Hematocrit (Hct) \_\_\_\_\_

White blood count (WBC) \_\_\_\_\_

Platelet count (plct) \_\_\_\_\_

5. What other medical conditions does the client have?

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6. List all medications:

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7. Does the client smoke?

Yes

No