# **Heparin-Induced Thrombocytopenia**

(HIT; Heparin-Induced Low Blood Platelet Count)

Pronounced: Hep-AH-ren IN-do-ced Thrombo-s-EYE-toe-PEE-nee-a

by Deanna M. Neff

En Español (Spanish Version)

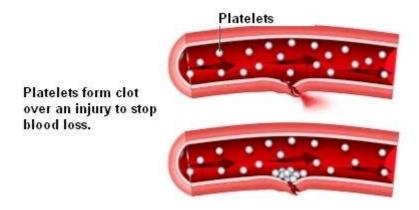
### **Definition**

Platelets are a special type of blood cell. They help form clots so that you do not bleed too much. <u>Heparin</u> is a blood-thinning medication that decreases clotting.

Thrombocytopenia means low blood platelet count. Heparin-induced thrombocytopenia is low blood platelet count caused by heparin. This condition can lead to a lot of bleeding. In some cases, it can also develop into excessive blood clotting. About 1%-2% of patients taking heparin may develop this condition.

This can become a serious condition. It requires care from your doctor.

Clot Formation



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#### Causes

This type of thrombocytopenia is caused by taking heparin.

### **Risk Factors**

Taking heparin is a risk factor for developing this condition. You may be taking heparin if you have had:

- Certain heart, lung, or blood vessel conditions
- Surgery such as heart or orthopedic surgery
- Kidney <u>dialysis</u> and <u>blood transfusions</u>

You may also be taking it if you are bedridden. Tell your doctor if you are taking heparin.

## **Symptoms**

If you have any of these symptoms, do not assume it is due to this condition. These symptoms may be caused by other conditions. Tell your doctor if you have any of these:

- Bleeding
  - Excessive bleeding from cuts
  - Bleeding from your gums or nose
  - Superficial bleeding on the skin (looks like reddish/purple spots, often on the legs)
  - Blood in urine or stool
  - Heavy menstrual flow
  - Excessive bleeding during surgery
- Pain or swelling in the legs
- Chest pain
- Difficulty breathing
- Anxiety
- Sweating
- Rapid, irregular heartbeat

Also let your doctor know if you have past blood tests showing a low blood platelet count.

# **Diagnosis**

Your doctor will ask about your symptoms and medical history. A physical exam will be done.

Tests may include the following:

- Complete blood count (CBC) —a routine blood test that shows your platelet count
- Other special blood tests, such as a heparin-induced platelet aggregation test
- Ultrasound of limbs or other areas to detect a clot

#### **Treatment**

Talk with your doctor about the best plan for you. Treatment options include the following:

- Stopping the use of heparin
- Anticoagulating drugs—to reduce the risk of blood clots:
  - Danaparoid
  - Refludan ( lepirudin)
  - Argatroban
  - Arixtra (fondaparinux)
  - Angiomax (bivalirudin)
- Vitamin K Antagonists Therapy (VKA)— Vitamin K given once your platelet count has recovered
- Blood transfusion —for severe bleeding, to replace lost blood

#### Prevention

To help reduce your chance of getting heparin-induced thrombocytopenia, discuss with your doctor the following:

- Avoiding heparin use
- Taking anticoagulants, such as Argatroban or Angiomax (bivalirudin)

#### **RESOURCES:**

American Academy of Family Physicians <a href="http://www.aafp.org/">http://www.aafp.org/</a>

American Heart Association <a href="http://www.americanheart.org/">http://www.americanheart.org/</a>

#### **CANADIAN RESOURCES:**

Canadian Cardiovascular Society <a href="http://www.ccs.ca/home/index\_e.aspx">http://www.ccs.ca/home/index\_e.aspx</a>

Heart and Stroke Foundation of Canada <a href="http://ww2.heartandstroke.ca/">http://ww2.heartandstroke.ca/</a>

Thrombosis Interest Group of Canada <a href="http://www.tigc.org/">http://www.tigc.org/</a>

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