CONDITION

Essential thrombocytopenia

Essential thrombocytopenia is an older term usually referring to immune thrombocytopenia, which causes a low platelet count.

WHAT IT IS
Immune-related condition causing too few platelets

BODY SYSTEM
Blood and immune system

MAIN SYMPTOMS
Bruising, pinpoint spots, nosebleeds, heavy periods

WHAT CAUSES IT
Immune attack on platelets, often trigger unknown

HOW IT IS DIAGNOSED
Blood counts, blood film, exclusion of other causes

MAIN TREATMENT
Monitoring or medicines that raise platelet counts

CAN IT BE CURED?
Sometimes - treatment-free remission can occur

IS IT AN EMERGENCY?
Sometimes - heavy or internal bleeding signs

LONG-TERM OUTLOOK
Often manageable; some cases become long-term

Overview

"Essential thrombocytopenia" is not a commonly used modern medical name. It has sometimes been used for what is now called immune thrombocytopenia , or ITP . ITP is a condition in which the immune system mistakenly destroys platelets and may also reduce their production.

Platelets are small blood cells that help form clots and stop bleeding. In thrombocytopenia, the platelet count is lower than normal. A low count can make bruising or bleeding more likely, although the count alone does not show exactly how much someone will bleed.

The name can be confused with essential thrombocythaemia , also called essential thrombocythemia. That is a different condition involving too many platelets rather than too few. If "essential thrombocytopenia" appears in your records, it is worth confirming which

condition was intended.

ITP may be brief, especially in children, or continue for months or years. Many people have mild symptoms and need monitoring rather than immediate treatment. Severe bleeding is uncommon, but it requires urgent care.

Symptoms

Some people have no symptoms. Their low platelet count is found during a blood test performed for another reason.

When symptoms occur, they usually involve bleeding in the skin or from moist surfaces such as the mouth and nose. They may include:

Blood in urine, vomit, or bowel movements can occur but is less common. Bleeding inside the skull is rare and is an emergency.

Fatigue is often reported by people with ITP. The reason is not always clear. Blood loss can also cause anaemia, meaning too few oxygen-carrying red blood cells, which may contribute to tiredness or breathlessness.

Symptoms do not always match the platelet count. One person may have few symptoms with a very low count, while another may notice bleeding at a higher count.

- Bruising more easily than expected
- Petechiae, which are tiny red, purple, or brown spots under the skin
- Nosebleeds or bleeding gums
- Heavier or longer menstrual periods
- Bleeding that takes longer than usual to stop
- Blood blisters inside the mouth

Causes and risk factors

ITP is an autoimmune condition. This means the immune system reacts against the body's own platelets. Antibodies and immune cells can remove platelets from the bloodstream, particularly in the spleen. The immune reaction may also interfere with new platelet production in the bone marrow.

In primary ITP , no underlying cause is found. It is not usually inherited, and it is not something you can catch from another person.

In secondary ITP , the immune reaction is linked to another factor or condition. Possible associations include:

Children may develop ITP after an infection and often recover within several months. In adults, the condition is more likely to persist, although improvement or remission can still occur.

Many people have no clear trigger. Having ITP does not mean that you caused it through diet, exercise, stress, or another everyday activity.

- Certain viral infections
- Autoimmune conditions such as lupus
- Some blood or immune-system conditions
- Certain medicines
- Pregnancy

Diagnosis

There is no single test that proves someone has ITP. Diagnosis is based on finding a low platelet count and ruling out other explanations.

A complete blood count measures platelets, red blood cells, and white blood cells. In typical ITP, the platelet count is low while the other blood cell counts are usually normal. The test may be repeated to confirm the result.

A blood film, also called a peripheral blood smear, allows the blood cells to be examined under a microscope. It can show whether platelets have clumped inside the sample, which can create a falsely low automated count. It can also identify blood cell changes that suggest a different cause.

The assessment usually includes questions about bleeding, infections, pregnancy, alcohol use, other health conditions, and all medicines and supplements. Some medicines can reduce platelet numbers or interfere with platelet function.

Further blood tests may look for infections or medical conditions linked to thrombocytopenia. Testing is chosen according to your history, examination, and initial results.

A bone marrow test is not routinely needed when the findings are typical of ITP. It may be considered when other blood cell counts are abnormal, the diagnosis is uncertain, or the response to treatment is unexpected.

Other causes of low platelets include liver or bone marrow conditions, severe infections, vitamin deficiencies, pregnancy-related conditions, and reactions to medicines. This is why a

low platelet result should not be assumed to be ITP without an appropriate assessment.

Treatment and management

Treatment aims to prevent important bleeding and maintain a safe platelet count. It does not always aim to return the count to the normal range.

If you have little or no bleeding and your platelet count is considered safe for your circumstances, monitoring may be appropriate. Follow-up usually includes blood counts and discussion of any new bleeding. Treatment decisions also take account of age, other health conditions, medicines, occupation, activities, pregnancy, and planned procedures.

When treatment is needed, options may include corticosteroids like prednisone or hydrocortisone . These medicines reduce immune activity and can raise the platelet count, but they may cause significant side effects, especially when used for longer periods.

Intravenous immunoglobulin, often shortened to IVIG, can produce a faster temporary rise. It may be used when a rapid response is needed, including around serious bleeding or some procedures.

If ITP continues or returns, longer-term options can include:

Splenectomy can lead to a lasting response for some people, but it creates a lifelong increased risk from certain infections and may increase the risk of blood clots. Vaccination and infection precautions are important when this procedure is being considered.

Critical bleeding is treated in hospital. Treatment may combine medicines that raise platelets quickly with platelet transfusions and measures directed at the bleeding site.

Do not stop a prescribed medicine because of a low platelet result without medical advice. Some medicines, including aspirin, anti-inflammatory pain medicines, blood thinners like warfarin or apixaban , and certain supplements, may affect bleeding risk, but stopping them suddenly can also be harmful.

- Medicines that encourage the bone marrow to make more platelets
- Medicines that reduce parts of the immune response
- Removal of the spleen, called splenectomy, in selected cases

Complications

The main complication is bleeding. Most bleeding affects the skin, nose, mouth, or menstrual

cycle. Major internal bleeding is much less common.

Repeated or heavy blood loss may cause iron deficiency and anaemia. Heavy periods can have a substantial effect on sleep, work, school, and daily activities even when they are not an emergency.

Treatment can also cause complications. Corticosteroids may affect mood, sleep, blood pressure, blood sugar, bones, and infection risk. Immune-suppressing treatments can increase susceptibility to infection. Some ITP treatments and splenectomy may be associated with blood clots, even though the platelet count has been low.

Pregnancy may require closer monitoring because platelet counts can change and treatment choices may need adjustment. Most people with ITP can have a successful pregnancy with coordinated care.

Prevention

Primary ITP cannot currently be prevented. It is usually not possible to predict who will develop it, and no diet or supplement has been shown to prevent the immune reaction.

If you have ITP, you may be able to reduce avoidable bleeding. Review over-the-counter medicines and supplements before using them, particularly products that affect platelets. Use suitable protective equipment for activities with an injury risk, and discuss contact sports or high-impact activities if your count is very low.

People without a functioning spleen need specific vaccination and infection precautions. These reduce complications of splenectomy rather than preventing ITP itself.

Living with it and what to expect

Platelet counts can rise and fall over time. Changes may follow an infection, treatment, pregnancy, or no clear event. One test result therefore may not represent the long-term pattern.

Many children recover without the condition becoming long-term. Adults are more likely to have persistent or chronic ITP, but the course is not the same for everyone. Some enter remission, some need occasional treatment, and others need continuing treatment to maintain a safer count.

Most people can continue work, education, exercise, travel, and family life. Activities may need temporary adjustment when the platelet count is very low or bleeding is active. Planning is also

important before surgery, dental procedures, pregnancy, or starting a medicine that affects clotting.

Keep a current list of your medicines and tell healthcare professionals about the low platelet count before procedures. If your spleen has been removed, carry the recommended medical information and follow your infection plan.

Routine follow-up may become less frequent when counts and symptoms are stable. New bleeding, treatment side effects, or major changes in the platelet count may require an earlier review.

When to get medical help

Arrange a routine medical review if you develop unexplained bruising, pinpoint skin spots, repeated nosebleeds, bleeding gums, or heavier periods. You should also seek advice if known ITP symptoms are increasing, you are planning pregnancy or a procedure, or a new medicine has been recommended.

Seek urgent medical assessment for bleeding that is difficult to stop, a significant injury, or a head injury when your platelet count is low.

Get emergency help for:

These symptoms do not necessarily mean that ITP is the cause, but they need prompt assessment.

- A sudden severe or unusual headache
- Confusion, fainting, weakness, difficulty speaking, or vision changes
- Vomiting blood or coughing up a significant amount of blood
- Black, tar-like bowel movements or substantial blood in urine
- Heavy bleeding that continues despite firm pressure
- Severe bleeding with dizziness, breathlessness, or collapse

Common questions

Is essential thrombocytopenia the same as essential thrombocythaemia?

No. The names sound similar but describe opposite platelet problems. "Essential thrombocytopenia" is an older term usually referring to immune thrombocytopenia, which causes too few platelets. Essential thrombocythaemia causes too many platelets.

Is immune thrombocytopenia a cancer?

No. ITP is an immune condition, not a cancer. However, other conditions can also cause a low platelet count, which is why the diagnosis includes checking for alternative causes.

Can ITP go away completely?

It can. Many children recover, often within months. Adults may also enter remission, but adult ITP is more likely to continue or return. Remission means the platelet count remains safe without ongoing treatment; it cannot be predicted for an individual.

Can I exercise with a low platelet count?

Many people can remain active. The safest type of exercise is influenced by your count, bleeding symptoms, and risk of falls or impact. Walking and other lower-impact activities may be suitable when contact sports or activities with a head-injury risk are not.

Does food raise the platelet count?

No specific food has been shown to treat ITP. A balanced diet supports general health but does not replace monitoring or treatment. Supplements marketed for platelet production may interact with medicines or affect bleeding.

Can I have dental work or surgery?

Usually, but planning may be needed. The acceptable platelet count and treatment plan are influenced by the procedure and its bleeding risk. Make sure the dental or surgical team knows about your platelet condition in advance.

Sources

- Neunert C, Terrell DR, Arnold DM, et al. "American Society of Hematology 2019 Guidelines for Immune Thrombocytopenia." Blood Advances . 2019;3(23):3829-3866.
- Provan D, Arnold DM, Bussel JB, et al. "Updated International Consensus Report on the Investigation and Management of Primary Immune Thrombocytopenia." Blood Advances . 2019;3(22):3780-3817.
- Cooper N, Ghanima W. "Immune Thrombocytopenia." New England Journal of Medicine . 2019;381:945-955.
- National Heart, Lung, and Blood Institute. "Immune Thrombocytopenia." Health information from the US National Institutes of Health.
- American Society of Hematology. "Immune Thrombocytopenia." Patient information from the ASH Foundation.