CONDITION

Purpura hemorrhagica ITP

Immune thrombocytopenia is a condition in which the immune system lowers the number of blood-clotting platelets.

WHAT IT IS
Immune condition causing a low platelet count

BODY SYSTEM
Blood and immune system

MAIN SYMPTOMS
Easy bruising, pinpoint spots, nosebleeds, heavy periods

WHAT CAUSES IT
Immune attack on platelets, sometimes linked to another condition

HOW IT IS DIAGNOSED
Blood count, blood smear, and exclusion of other causes

MAIN TREATMENT
Monitoring, immune treatment, or platelet-boosting treatment

CAN IT BE CURED?
Sometimes - often resolves in children

IS IT AN EMERGENCY?
Sometimes - severe or internal bleeding

LONG-TERM OUTLOOK
Often manageable; some cases resolve while others persist

Overview

Purpura hemorrhagica is an older name for immune thrombocytopenia , usually shortened to ITP . It has also been called idiopathic thrombocytopenic purpura or Werlhof disease. "Idiopathic" means that no cause was known, but experts now understand that the immune system is involved.

ITP causes a low number of platelets. Platelets are small blood cells that gather at an injury and help form a clot. When there are too few, you may bruise or bleed more easily.

In ITP, the immune system mistakenly targets platelets and removes them from the blood. It may also interfere with platelet production in the bone marrow, the soft tissue inside bones where blood cells are made.

ITP affects people differently. Some have no symptoms and learn about it through a blood test. Others develop skin changes, nosebleeds, heavy menstrual bleeding, or bleeding inside the body. Serious bleeding is uncommon, but it requires urgent treatment.

Doctors describe ITP as newly diagnosed during the first three months, persistent when it lasts 3 to 12 months, and chronic when it continues beyond 12 months. These terms describe time, not how severe the condition is.

Symptoms

The symptoms of ITP come from bleeding into the skin or from areas such as the nose, mouth, digestive tract, or uterus.

Common signs include:

Petechiae often appear on the lower legs, but they can occur elsewhere. Their colour may be less obvious on brown or black skin, where checking inside the mouth or looking for new darker spots may help.

Some people report tiredness. Fatigue can occur even without major bleeding, although it may also have another cause. Ongoing blood loss can lead to iron-deficiency anaemia, meaning there are not enough healthy red blood cells because the body has lost iron.

A platelet count alone does not predict exactly who will bleed. In general, bleeding becomes more likely as the count falls, but symptoms, age, medicines, injuries, and other health conditions also matter.

- Petechiae: tiny red, purple, or brown spots caused by bleeding under the skin
- Purpura: larger purple or dark patches that do not fade when pressed
- Bruises that appear easily or are larger than expected
- Nosebleeds or bleeding gums
- Menstrual bleeding that is heavier or lasts longer than usual
- Bleeding that takes longer than expected to stop after a cut
- Blood in the urine or bowel movements

Causes and risk factors

ITP is an autoimmune condition. This means the immune system, which normally fights infection, reacts against the body's own platelets.

In many people, no specific trigger is found. This is called primary ITP . It is not usually inherited and cannot be passed to another person.

Secondary ITP occurs in connection with another condition or exposure. Possible associations include:

A low platelet count after a medicine is not always ITP. Some medicines cause a separate condition called drug-induced thrombocytopenia. Identifying it matters because the platelet count may recover after the responsible medicine is stopped. Do not stop a prescribed medicine without medical advice.

In children, ITP may begin after a viral illness and often improves within months. In adults, it is more likely to continue, although remission is still possible. Pregnancy can reveal previously unrecognised ITP or change an existing platelet count.

- Some viral infections, including HIV and hepatitis C
- Autoimmune conditions such as lupus
- Certain blood cancers or immune disorders
- Some 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 clinician will ask about bleeding, recent infections, pregnancy, alcohol use, other medical conditions, and all medicines or supplements. A physical examination may look for skin bleeding, an enlarged liver or spleen, or signs suggesting another cause.

Tests commonly include:

Platelets can sometimes clump inside a blood sample tube. This produces a falsely low laboratory result, so repeating the test may prevent an incorrect diagnosis.

Typical ITP mainly affects platelets. Abnormalities in other blood cells may point toward infection, liver problems, a bone marrow condition, or another explanation.

A bone marrow test is not routinely needed when the history, examination, and blood results are typical of ITP. It may be considered when results are unusual, the diagnosis remains uncertain, or another bone marrow condition is suspected.

- A complete blood count , which measures platelets, red blood cells, and white blood cells
- A repeat platelet count to confirm that the result is real
- A blood smear , in which blood cells are examined under a microscope
- Tests for conditions associated with low platelets, chosen according to your history

Treatment and management

Not everyone with ITP needs active treatment. If bleeding is absent or minor and the platelet count is considered safe for your circumstances, regular blood tests and symptom monitoring may be enough.

The aim of treatment is usually to reach a platelet level that prevents important bleeding. It is not always necessary to return the count to the laboratory's normal range.

Treatment decisions take account of:

Corticosteroids like prednisone or hydrocortisone are commonly used as initial treatment. They reduce immune activity but can cause problems when used for too long, including mood changes, sleep disturbance, raised blood sugar, bone loss, and infection risk.

Intravenous immunoglobulin, or IVIG, is an infusion of antibodies collected from donated plasma. It can raise platelets more quickly, but its effect is often temporary. It may be used when bleeding is significant, before an urgent procedure, or when a prompt increase is needed.

When ITP persists or returns, options include medicines that encourage the bone marrow to make more platelets, medicines that change immune activity, and other targeted treatments. The best choice depends on your health, preferences, previous response, and access to treatment.

Removal of the spleen, called splenectomy , can produce a lasting remission in some people. The spleen is an organ that helps remove antibody-coated platelets. Surgery is not guaranteed to work and creates a lifelong increased risk from certain infections, so vaccination and infection precautions are important.

Severe or life-threatening bleeding is treated in hospital. Treatment may combine IVIG, corticosteroids, platelet transfusion, and measures directed at the bleeding site.

Aspirin and anti-inflammatory painkillers such as ibuprofen can interfere with platelet function. Blood thinners like warfarin or apixaban also affect bleeding risk. However, these medicines may be essential for another condition, so do not stop them without speaking to the clinician who prescribed them.

- Current bleeding and platelet count
- Age and other health conditions
- Medicines that affect clotting
- Work, sport, travel, and injury risk
- Pregnancy or planned procedures
- How long ITP has lasted
- The effects and burden of treatment

Complications

The main complication is bleeding. Most bleeding involves the skin or lining of the nose and mouth. Bleeding in the digestive tract or brain is much less common but can be serious.

Repeated or heavy menstrual bleeding may cause iron deficiency and anaemia. Possible symptoms include tiredness, shortness of breath on exertion, dizziness, or paleness.

ITP can also affect emotional wellbeing. Uncertainty about platelet results, fear of bleeding, frequent appointments, and limits on activities can be stressful.

Treatments have their own risks. These may include infection, blood clots, liver problems, high blood pressure, and side effects from corticosteroids. Although ITP is associated with bleeding, some people also have an increased risk of abnormal blood clots because of the condition, their age, other health issues, or certain treatments.

After splenectomy, infections caused by particular bacteria can become severe quickly. People without a spleen need specific vaccines and a clear plan for responding to fever or signs of infection.

Prevention

ITP itself usually cannot be prevented. It is an immune reaction, and most people do not have a known or avoidable trigger.

You can reduce the chance that a low platelet count will lead to harm. The precautions needed should match your platelet count and bleeding history rather than treating every activity as unsafe.

Helpful measures may include:

Avoiding all exercise is not usually necessary. Lower-impact activity can support physical and

mental health, but temporary restrictions may be advised when bleeding risk is higher.

- Checking before taking non-prescription medicines or supplements that affect bleeding
- Using protective equipment for activities with an injury risk
- Avoiding contact sports when the platelet count is very low
- Telling dentists and other healthcare professionals about ITP
- Planning surgery, dental work, pregnancy, or childbirth with the relevant care team
- Keeping recommended vaccinations up to date, especially after splenectomy

Living with it and what to expect

The course of ITP differs between children and adults. Many children recover within several months, particularly when ITP follows an infection. Some develop persistent or chronic ITP.

In adults, the condition is more likely to last beyond a year. Even then, platelet counts may rise and fall, and remission can occur. Some people need only monitoring. Others have periods of treatment or need long-term therapy to keep platelets at a safer level.

A low result can be upsetting, but treatment is not based on the number alone. Your bleeding symptoms, health, daily activities, and previous pattern are also important. Platelet counts may fluctuate after infections, during pregnancy, or when medicines change.

Routine follow-up may include blood counts, discussion of bleeding, and checks for treatment side effects. Contact your usual care team sooner if bruising or bleeding increases, rather than waiting for the next scheduled appointment.

Most people with ITP continue work, education, exercise, travel, relationships, and family life. Some adjustments may be needed during periods of very low platelets or active treatment. Carrying an up-to-date medicine list and information about your diagnosis can help if you need unexpected care.

When to get medical help

Arrange prompt medical advice if you develop new or increasing petechiae, unusual bruising, repeated nosebleeds, bleeding gums, or menstrual bleeding that is much heavier than usual. You should also seek advice if bleeding continues despite firm pressure or if you are pregnant and have ITP symptoms.

Contact your care team before surgery, dental extraction, or a procedure that could cause

bleeding. Routine follow-up is appropriate when you feel well, symptoms are stable, and testing is occurring as planned.

Seek emergency care for:

If you have had your spleen removed, fever or signs of a serious infection need urgent medical assessment because infection can progress quickly.

- Bleeding that is heavy, will not stop, or makes you faint or weak
- Vomiting blood or passing black, tar-like, or visibly bloody stools
- A sudden severe headache, confusion, weakness, difficulty speaking, or a seizure
- A significant head injury, especially with a very low platelet count
- Blood in the urine together with substantial bleeding elsewhere
- Breathing difficulty or other signs of a severe reaction during an infusion

Common questions

Is purpura hemorrhagica the same as ITP?

Purpura hemorrhagica and Werlhof disease are older names associated with ITP. The preferred modern term is immune thrombocytopenia . The acronym ITP remains in use even though not everyone develops purpura.

Is ITP cancer?

No. ITP is an immune condition, not cancer. However, other conditions, including some blood cancers, can cause a low platelet count. This is one reason diagnosis includes checking for other explanations.

Can ITP go away on its own?

Yes, it sometimes resolves without long-term treatment. This is especially common in children after a short illness. In adults, ITP is more likely to persist, but remission can still occur. No test can predict the exact course for one person.

What platelet count is dangerous?

There is no single count that predicts bleeding for everyone. Lower counts generally carry greater risk, but active bleeding, age, medicines, injuries, and other conditions also matter. Symptoms and the speed of change are considered alongside the number.

Can I exercise with ITP?

Many people can exercise. The safest type depends on your current platelet count, bleeding

history, and chance of injury. Walking, swimming, and other lower-impact activities may be suitable, while contact sports may need to be avoided when counts are very low.

Can I have a baby if I have ITP?

Many people with ITP have successful pregnancies. Pregnancy requires coordinated monitoring because platelet counts can change and treatment choices may differ. Planning ahead helps the obstetric and haematology teams prepare for pregnancy, delivery, and pain-relief options.

Sources

- American Society of Hematology 2019 guidelines for immune thrombocytopenia , Blood Advances , 2019
- Updated international consensus report on the investigation and management of primary immune thrombocytopenia , Blood Advances , 2019
- Immune Thrombocytopenia , National Heart, Lung, and Blood Institute
- Immune Thrombocytopenia , American Society of Hematology
- Thrombocytopenia in pregnancy , Blood , 2017