Immune thrombocytopenia (ITP)
**What is ITP?**
ITP is an autoimmune disease causing a shortage of platelets (thrombocytopenia) and bruising (purpura).

**What causes ITP?**
In ITP, the immune system mistakes the platelets as being foreign and destroys them. It can happen after a virus, vaccination or certain medications, but for most people the cause is unknown.

ITP that happens suddenly is known as acute ITP. If the platelet count remains low after 3 months it will be called persistent ITP. If the platelet count has not returned to normal after 12 months it will be called chronic ITP. The severity of the condition is noted by adding the term severe or mild. For example, someone with chronic severe ITP will have a troublesome condition with a very low platelet count for over a year.

**How is ITP diagnosed?**
It is usually diagnosed by a blood test which shows that the platelet count is low, and that the structure of platelets, red blood cells and white blood cells all look normal under a microscope.

A low platelet count can be caused by a number of other conditions so a number of blood tests will be needed to check for other causes of low platelets, such as liver disease and viral infections, including HIV.
A bone marrow biopsy may be taken at a later stage if the ITP continues. A small sample of bone marrow will be taken using local anaesthetic and examined under the microscope. Extra blood tests may be done at this time to check for rare clotting or immune diseases that can look similar to ITP. If the bone marrow looks normal, with the usual or higher number of platelet parent cells (megakaryocytes) and other blood tests are normal, then the doctor will diagnose ITP.

**What are platelets?**

There are 3 types of blood cell which are all formed in the bone marrow - red cells, white cells and platelets. Platelets, which are small, sticky and circulate in the bloodstream, provide the first ‘plug’ to stop bruising and bleeding after an injury, and stop blood leaking from blood vessels.

A blood sample is taken to measure the circulating platelets, and a normal platelet count is 100-400 (x 10^9/l). Anyone with a count less than 100 would be considered thrombocytopenic (short of platelets).

Many people with ITP have a platelet count in single figures, and on occasionally there are not enough circulating platelets to be counted.

The number of platelets circulating in our bodies fluctuates all the time, and no two consecutive platelet counts are likely to be exactly the same in a healthy person or someone who has ITP.
What is the difference between ITP and haemophilia?
Haemophilia is inherited and permanent, but ITP is not inherited, and can go into remission. Haemophilia patients are deficient in one of the clotting factors which act together to form a blood clot. ITP patients have fewer platelets, but the rest of the clotting mechanism works normally.

How common is ITP?
In the UK about 3,000-4,000 people have ITP at any one time. It is not more common in any racial or ethnic group.

What are the symptoms of ITP?
Some people with ITP, especially those with a count over 50, may have no symptoms at all, and their ITP is only noticed during a routine blood test. Even people with very low counts, can sometimes have few symptoms.

Common symptoms are petechiae (pin prick rash of blood spots), bruising, nosebleeds, gum bleeds, black mouth blisters, fatigue, heavy periods.

Rare symptoms are blood in the eyes, bleeding from the ears, blood in the urine, bleeding from the stomach, bleeding into the brain.
How is ITP treated?
Some adults with mild ITP may not need any treatment, but will be monitored with occasional blood tests. There is no cure for ITP and treatment is used to raise the platelet count to ease symptoms.

Usual treatments include steroids and/or antibody therapy (usually immunoglobulin, also known as IVIG).

Other treatments include medicines such as azathioprine, ciclosporin, cyclophosphamide, vinca alkaloids, danazol, dapsone, rituximab, eltrombopag, romiplostim, mycophenolate mofetil. Rarely, the spleen may be removed (splenectomy).

Tranexamic acid might be used to reduce bleeding after dental extractions. Hormone preparations and/or tranexamic acid may be prescribed to women having heavy periods.

Platelet transfusions may be used to stem active bleeding or during surgery, but they are not effective as a treatment for ITP as your immune system destroys transfused platelets as quickly as your own.

Other procedures and surgery
If a procedure (for example, biopsy, dental extraction) or surgery is planned, please tell us so we can arrange for you to have a platelet count check, any necessary treatment, and provide a plan.
Other medicines and over-the-counter preparations
It is important to avoid drugs that may affect how your platelets work. These include non-steroidal anti-inflammatory drugs (NSAIDs) and other anti-platelet drugs, for example, ibuprofen, aspirin, clopidogrel.

Use of drugs which affect blood clotting (including heparin, warfarin and rivaroxaban) should also be discussed with your haematologist. Where these drugs are needed, we will consider whether to continue the medication or advise a different medication or approach.

Before taking any over-the-counter preparations, including herbal and homeopathic remedies, please let us know.

When to seek help
You should contact the hospital if you have any of the following:
- a prolonged (over 30 minutes) nosebleed which will not stop despite pinching the nose
- prolonged gum bleeding
- blood in the faeces (poo) or urine (pee)
- a heavy bang to the head
- persistent or severe headache with loss of vision
- vomiting (being sick) or drowsiness.
Contact us
If you have any questions or concerns, please contact ITP nurse specialist, t: 020 7188 7188 bleep 3288, or Haematology Day Unit, t: 020 7188 2743, Monday to Friday, 9am-5pm. Out of hours, in an emergency please contact the haematology registrar on call through the switchboard, t: 020 7188 7188.

For more leaflets on conditions, procedures, and services offered at our hospitals, please visit w: www.guysandstthomas.nhs.uk/leaflets.

Pharmacy Medicines Helpline
If you have any questions or concerns about your medicines, please speak to the staff caring for you or call our helpline.
**t:** 020 7188 8748, Monday to Friday, 9am-5pm

Your comments and concerns
For advice, support or to raise a concern, contact our Patient Advice and Liaison Service (PALS). To make a complaint, contact the complaints department.
**t:** 020 7188 8801 (PALS), **e:** pals@gstt.nhs.uk
**t:** 020 7188 3514 (complaints)
**e:** complaints2@gstt.nhs.uk

Language and accessible support services
If you need an interpreter or information about your care in a different language or format, please get in touch.
**t:** 020 7188 8815    **e:** languagesupport@gstt.nhs.uk
NHS 111
This service offers medical help and advice from fully trained advisers supported by experienced nurses and paramedics. Available over the phone 24 hours a day.  
t: 111  w: www.111.nhs.uk

NHS website
This website gives information and guidance on all aspects of health and healthcare, to help you take control of your health and wellbeing.  
w: www.nhs.uk

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w: www.guysandstthomas.nhs.uk/leaflets, or  
e: patientinformationteam@gstt.nhs.uk

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