

Idiopathic Thrombocytopenia Purpura (ITP) in Adults

What is ITP?

Idiopathic thrombocytopenia purpura (ITP) is a condition that causes low platelets. Platelets are small cells that circulate in the blood and are responsible for preventing bleeding and bruising. Patients with low platelets are at risk of bruising and, rarely, serious bleeding.

What causes ITP?

We do not exactly know what causes ITP. In children, we think ITP occurs after a viral infection when the immune system becomes overactive — this isn't always the case in adults. In adult patients, the increase in bruising and bleeding is usually gradual, occurring over a few days to weeks.

How common is ITP?

ITP in adults is uncommon, occurring in approximately 1 in every 16,000 adults per year. Many cases occur in females between 20–40 years of age.

What are the main problems with having ITP?

Platelets are small cells that stop bleeding and bruising. The normal platelet level is 150,000–400,000 per microlitre of blood. These cells become very sticky at a cut or bruise and form a plug that stops further bleeding.

If a patient has low platelets, they are at risk of increased bruising or bleeding — generally not a major problem unless platelets fall below 30,000–50,000 per microlitre.

What are the symptoms of ITP?

Most patients with ITP experience only a mild increase in bruising. Some develop small pinpoint spots of bleeding on the skin called petechiae. Others get more extensive bruising, and sometimes bleeding involving the lining of the mouth and nose (mucosal bleeding). Rarely, patients may have bleeding in the bowel or major bleeding during surgery. The most serious complication of ITP is bleeding into the brain, though the risk of this is very low.

Does ITP get better?

Although many cases of ITP in adults do not fully resolve, the majority do not need any treatment. One study of 150 adult patients over 10 years showed 93% achieved an “adequate” platelet count of greater than 30,000 per microlitre within 2 years of diagnosis, the vast majority without any treatment.

What is the treatment for ITP?

Treatment is generally only recommended when there is more significant bleeding, often from the mouth or nose. This is always assessed individually and discussed with your doctor. Available treatments may increase the platelet count but may not change the underlying condition. First-line treatments are:

- Prednisolone — a steroid medication thought to slow down the immune system. Treatment in adults is often for a few weeks at a time. Common side effects include weight gain, irritability, and possibly thinning of the bones, usually only after a few weeks of treatment.

- IVIG — a blood product consisting of concentrated antibodies, thought to work by tricking the immune system. Given via intravenous infusion over a few hours, requiring day admission to hospital. Side effects are uncommon but can include a flu-like feeling or headache lasting a day or two.

What if ITP doesn't settle with first-line treatment?

For ITP lasting longer than about 3 months that hasn't responded well to steroids, current guidelines support a wider choice of second-line options, decided together with your doctor based on your preferences:

- Thrombopoietin receptor agonists (TPO-RAs) — medications that stimulate the bone marrow to produce more platelets, rather than working on the immune system. Available as a daily tablet (eltrombopag) or a weekly injection (romiplostim). These are now a well-established option and are often tried before more invasive treatments.
- Rituximab — an antibody-based infusion that reduces the immune cells thought to be attacking platelets. Given as a course of infusions, with effects that can last months to years in some patients.
- Splenectomy — surgical removal of the spleen, part of the immune system involved in removing platelets from the bloodstream. Current guidelines generally suggest avoiding splenectomy within the first year of diagnosis where possible, since some patients still go into remission on their own during that time. Special vaccinations are needed at least 2 weeks prior, and daily antibiotics may be advised afterward to reduce infection risk.
- Other treatments — several other therapies exist for ITP that doesn't respond to the above; best discussed with your doctor.

What else do I need to do?

Regular blood tests and review with your doctor is generally all that's required — remember, most patients with ITP get better, it may just take a bit longer in some.

References

1. Neunert C, Terrell DR, Arnold DM, et al. American Society of Hematology 2019 guidelines for immune thrombocytopenia. *Blood Advances*. 2019;3(23):3829-3866.
2. Provan D, Stasi R, et al. International consensus report on the investigation and management of primary immune thrombocytopenia. *Blood* 2010;115(2):168-186.

Further Questions?

The information presented in this fact sheet is intended as a general guide only.

Patients should seek further advice and information about **Idiopathic Thrombocytopenia Purpura (ITP) in Adults** and their individual condition from their treating haematologist or doctor.

For additional information about blood disorders and their treatment, or to contact one of our specialist haematologists, visit the Melbourne Haematology website:

www.melbournehaematology.com.au