Immune Thrombocytopenic Purpura (ITP)

This leaflet explains what ITP is, how it may affect your child and how it is managed. If you have any concerns or questions, please ask your doctor or nurse.

What is ITP?

Immune thrombocytopenic purpura (ITP) is a disorder that affects normal platelets. Platelets are one of the three 'cellular' components of blood, along with red and white blood cells. Platelets are small and sticky and their job is to prevent excessive bruising and stop bleeding after an injury. The normal platelet count is between is 150 to 400 x 10^9/l. In most cases of ITP the platelet count is less than 20 x 10^9/l. A low platelet count is called 'thrombocytopenia'.

What are the causes?

ITP is a medical term for a condition in which there is often bruising (purpura) because there are fewer platelets in the blood than usual (thrombocytopenia) and is usually caused by antibodies in the blood (usually produced to fight a recent infection) attacking and destroying the normal platelets as they circulate round the body. The immune system makes antibodies against the platelets, seeing them as being foreign and destroys them. In many cases this may follow a viral infection.

About four in every 100,000 children develop ITP each year.

Signs and symptoms of HSP

Most children with a platelet count of under 20 x 10^9/l will have petechiae (pinprick bright red blood spots under the skin) and limited bruising. Bruising most commonly follows minor knocks ("easy bruising") but may also occur spontaneously without trauma (purpura). It the child cuts themselves (after a fall) they will bleed for longer and more profusely than normal. Apart from the bruising/bleeding the children are otherwise well i.e. they are not sick. Consequently, the child will continue to run around and play and therefore are more likely to get even more bruises. Common sites of spontaneous bleeding are the gums and nose. Girls may be troubled with heavy periods.

Less common and potentially serious are spontaneous bleeds occurring from the gut or brain. Data from international studies suggests that the risk of serious bleeds is about three in 100 children and the risk of brain bleeds is about one in 300 children. These brain bleeds most often occur in the first week of ITP, but not always and can be due to rare pre-existing abnormality of the blood vessels in the head. The risk of serious bleeding is greatly reduced once the platelet count recovers to above 20 x 10^9/l.

What is the treatment?

Most children do not need any treatment unless they have severe bleeding, and most children improve whether or not treatment is given. The type of treatment recommended depends on your child's symptoms rather than their platelet count. All the various forms of treatment aim to temporarily improve the platelet count and do not cure the condition itself.

Keeping children with ITP safe: school, sports and holidays

- **Avoid Aspirin + Ibuprofen as these can affect the normal platelet function and make bleeding more likely.**
- Most severe bleeds tend to occur in the first few weeks and in children with a platelet count under 20 $x10^9$/l. If children are well, provided their nursery or school is aware of the diagnosis and play can be supervised (avoiding all contact sports), children with ITP can continue back at school as normal.
- The ITP Support Association produces a document for schools, clubs and playgroups. However, carers need to know that any knock will result in more bruising and possibly bleeding and any serious injury particularly a head injury will require immediate hospital attendance and all patients with ITP should have open door access.
- If your child is on steroids and has not had chicken pox then school will need to inform you if anyone in your child's class/nursery comes down with chicken pox.
- At home it is best to take sensible precautions which all children should follow such as only cycling with a helmet and if swimming no diving into the shallow end! It is sensible to avoid sports where there is a risk of head injury whilst the platelet count is below 50 $x10^9$/l.

When to seek help?

When your child is sent home you will be given a clinic appointment for review at the hospital and an emergency number (Dolphin ward: 0118 322 8079 or 0118 322 8075). You should contact the hospital in the following circumstances:

- A prolonged (over 20 minutes) nosebleed which will not stop despite pinching the nose/applying a cold compress to the forehead/nasal bridge.
- Prolonged gum bleeding.
- Haemorrhages in the mouth, particularly all over the hard and soft palate and lips.
- Blood in the faeces (stool) or urine.
- Following a heavy blow to the head, particularly if the child is stunned or becomes drowsy.
- Persistent or severe headache.
- Vomiting or drowsiness.

References:

Bromberg ME, *Immune Thrombocytopenic purpura- the changing therapeutic landscape.* NEngl J Med, 2006:355(16) 1643-1645

Grainger et al, *Changing trends in the UK management of childhood ITP*. Arch Dis Child, published online Oct 28, 2011

Contacting us

Kempton Day Bed Unit: 0118 322 7512 / 8754 (Mon-Fri 7am-7pm)
Lion/Dolphin Wards: 0118 322 7519 / 8075 (outside of these hours)

Further information

ITP Support Association, "Synehurste", Kimbolton Road, Bolnhurst, Beds MK44 2EW
info@itpsupport.org.uk

To find out more about our Trust visit www.royalberkshire.nhs.uk

Please ask if you need this information in another language or format.

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