Thrombotic Thrombocytopenic Purpura (TTP)

What is TTP?

Thrombotic Thrombocytopenic Purpura (TTP) is a blood disorder that causes blood clots to form in the body’s small blood vessels. Blood clots can cause serious problems if they block blood flow to organs such as the heart, brain or kidneys.

Platelets are tiny blood cells that help form blood clots. The increase of blood clots that happen with TTP, uses up many of the platelets in the blood. This can lead to a low platelet count called thrombocytopenia. With fewer platelets in the blood, you are at risk for bleeding problems.

What causes TTP?

When a person has TTP, they have problems with an enzyme in the body called ADAMTS13. Problems with this enzyme can cause trouble with normal blood clotting. There are rare cases in which some people have a genetic (family history) form of TTP. They are born with low levels of ADAMTS13.

The most common type of TTP is called acquired or idiopathic TTP. In this type of TTP the body makes antibodies that block how the enzyme ADAMTS13 normally works in the body.

Other causes of TTP may include:

- Cancer
- Chemotherapy
- Pregnancy
- HIV infection
- Lupus
- Certain medicines

This handout is for informational purposes only. Talk with your doctor or health care team if you have any questions about your care.

What are the symptoms of TTP?
People with TTP may have the following:
- Purple spots or bruises on the skin (purpura)
- Tiny red or purple dots (petechiae) on the skin that looks like a rash
- Pale skin or jaundice (yellowing of the skin or eyes)
- Fever
- Fatigue
- Pain in the abdomen
- Anemia
- Headaches, confusion or seizures

How is TTP diagnosed?
Your doctor will talk with you about your symptoms, take a medical history and do a physical exam. You will also have lab tests to check your blood and how your other organs are working.

How is TTP treated?
Plasma exchange is a procedure used that helps TTP. The plasma (the liquid part of the blood) is removed and replaced with plasma from a donor. This treatment is often done daily until TTP symptoms improve.

Please see the patient education sheet on Therapeutic Plasma Exchange for more information.

What is the prognosis for TTP?
Most people with TTP improve after treatment. However, some patients may continue to have problems from TTP and may need more treatment.