

## THROMBOTIC THROMBOCYTOPENIC PURPURA: TREATMENT OPTIONS

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Thrombotic Thrombocytopenic Purpura (TTP) is a rare blood disorder that results in tiny blood clots affecting small blood vessels. This leads to low levels of platelets (blood clotting cells) in the blood and numerous small red-purple skin discolorations. TTP can affect any organ system but typically affects the brain and the kidneys. While the cause of this condition is unclear, we do know that patients with this condition have low levels of certain chemicals in the blood that slow or stop clots from forming. When these low levels are present, multiple clots can form in the body. Patients with TTP may complain of fatigue, seizures, strokes, confusion, decreased urine output, and may have an enlarged spleen. After taking a history and doing a physical, your physician would confirm the diagnosis of TTP with blood work.

### STANDARD TREATMENTS:

- Plasma exchange, also known as plasmapheresis, is the treatment of choice. This involves separating the liquid part of blood and exchanging it with donor plasma. Your physician will know this treatment is working by watching for a decrease or reversal of symptoms, normal blood work, and normal kidney function. The most common side effect is a drop in your blood pressure. If you have very low calcium levels, you may not be able to get this treatment.
- Your physician may use steroids (like cortisone) in addition to plasma exchange. These medicines may be given either by mouth or through an IV depending on how severe symptoms are. Treatment is typically continued for 5-7 days after plasma exchange is stopped. The dose is then tapered and discontinued over a few weeks. Steroids have also been used in difficult cases.
- Rituximab is a special medication given through an IV once per week after plasma exchange to help speed up your body's response to therapy. It can reduce the risk of relapses by changing your immune system.
- Rarely, patients may require a platelet transfusion if they experience significant blood loss or undergo an invasive procedure or surgery.
- Your physician will continuously monitor and assess you for worsening or new symptoms, complications from treatment, or lack of response to treatment.

### PREVENTIVE MEASURES:

There are no preventive measures that can be taken to prevent TTP; however, there are steps you can take before and during treatment. This includes staying well hydrated and drinking plenty of water, adequate sleep, healthy diet high in protein and low in sodium and potassium, avoid cigarette smoking, and make sure you are up to date with recommended vaccinations. It is also important that you keep all of your appointments and take all of your medications as prescribed.

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**SOURCE(S):** *Medscape and UpToDate.com*

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