Thrombotic thrombocytopenic purpura (TTP) is a rare, life-threatening disorder. We describe the management of a parturient who had normal vaginal delivery under epidural analgesia and was then diagnosed to have TTP in the immediate postpartum period.

Clinical Features: The patient was consented. A 41 year old G2P1 (BMI: 22.5Kg/m2) was admitted to the labour floor at 39 weeks of gestation. She requested labour epidural analgesia on admission. She was known to have pregnancy induced hypertension at 24 weeks of gestation and was on antihypertensive medications including oral labetalol 200mg TID and oral nifedipine 30mg TID during her pregnancy. She denied history of headache, vomiting, blurring of vision, abdominal pain, decreased urine output, swelling of limbs and previous hospitalization. She had an uneventful normal vaginal delivery 3 years ago. She had an unremarkable physical and systems examination. On admission, her platelet count was 85,000/cu.mm with Hb of 93g/L with AST: 25U/dl, ALT: 23U/dl and mild proteinuria.

After informed consent, epidural analgesia was initiated after a negative test dose and maintained with 0.08% bupivacaine and fentanyl 2mcg/cc. She delivered a healthy baby weighing 2400g with APGAR scores of 8 and 9 at 1 and 5 minutes respectively. However, the patient’s platelet count dropped to 60,000/cu.mm early after delivery and then to 23,000/cu.mm on 1st postpartum day (PPD) (Figure 1). Petechia was noted over her arms and trunk without clinical evidence of bleeding. Hematologist was consulted and evaluated for HELLP syndrome, ITP and DIC. However, the diagnosis of TTP was made based on clinical and laboratory work up ADAMTS 13 , enzyme assay for the diagnosis of TTP was found to be <2.5% (Normal:>10%). Plasmapheresis was instituted on PPD 2. Blood and blood products were transfused for 2 weeks with close monitoring of neurological status and signs of sepsis. The epidural catheter was left insitu and was removed with the platelet count of 105,000/cu.mm and ADAMTS13 activity of >10% on 5th PPD. She was discharged on 15th PPD, issued a warning card documenting the complications that she had during her post-partum period and advised to have regular follow up.

Conclusion: Parturients with idiopathic TTP during pregnancy have high relapse rate of 12-61%. The serial analysis of ADAMTS 13 activity, the role of prophylactic plasma exchange and identifying parturients at the greatest risk for relapse would be of considerable interest.