## Antiphospholipid Syndrome with two Complications in an Early Pregnancy: Intracranial Venous Sinus Thrombosis Followed by Fetal Death

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Intracranial dural sinus thrombosis is a rare complication of pregnancy during first trimester. But in this case, 10 weeks of pregnancy with antiphospholipid antibody syndrome resulted in transverse sinus thrombosis followed by fetal death under anticoagulant therapy. Presence of antiphospholipid antibodies should be investigated in women presenting with thrombosis and fetal loss especially in early pregnancy. Counseling about risks during the pregnancy and subsequent pregnancies should be provided to patient.

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Key Words: Antiphospholipid syndrome, Dural sinus thrombosis

Intracranial dural sinus thrombosis is a rare complication of pregnancy during first trimester. Anticardiolipin antibodies and lupus anticoagulant are strongly associated with thrombosis and fetal loss in pregnancy. Women having anticardiolipin antibodies have about 50% risk of fetal loss characteristically intrauterine fetal death. In this case, 10 weeks of pregnancy with antiphospholipid antibody syndrome resulted in transverse sinus thrombosis followed by fetal death under anticoagulant therapy.

25 years old woman, whose first delivery was preterm, was admitted at the tenth week of her second pregnancy to Cerrahpaşa Medical Faculty. She had complained of nausea and vomiting for three weeks and severe frontal headache for one week before admission. In last 12 hours she had had generalized convulsions two times and no further convulsions have been observed. There was no history of systemic disease.

At initial examination showed neck stiffness and flexion posture. Fundi were normal. Laboratory work were within normal limits except for mild leucocytosis and anemia. Gestational sac and 10 weeks of living embryo were seen in obstetric ultrasonography.

Left transverse sinus thrombosis and venous hemorrhagic infarct in the left temporal lobe were confirmed on MR

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Submitted for Publication: 01.01.1998 Accepted for Publication: 15.02.1998 (Figure 1). Coagulation tests were within normal limits. Heparin, 5000 Units, was begun every six hours by continuous intravenous infusion together with anticonvulsant therapy after the intracranial sinus thrombosis was diagnosed. The clinical status of the patient following the admission day recovered rapidly. She was mentally cleared and mobilized two days later.

After consulting to the neurologist by taking care of the dramatic recovery of clinical state, it was decided to let the pregnancy continue under anticoagulant therapy.

Unexpectedly, two months later, the patient was admitted again with the complaint of no feeling of fetal movements. It was death on ultrasonography. After therapeutic abortion, autopsy revealed amniptic fluid aspiration and extensive infarcts on the plasenta. Anticardiolipin IgG and IgM and lupus anticoagulant tests were performed on suspicion of anticardiolipin antibody syndrome and It was diagnosed on the basis of high titers of anticardiolipin IgG (30 GPL Units) and positive lupus anticoagulant with clinical features.<sup>2</sup>



Figure 1a.

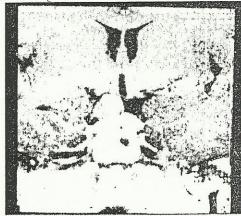


Figure 1b. Axial T1, coronal T2 weighted images and MR angiography clearly show left transverse sinus thrombosis and ipsilateral inferior temporal gyrus hemorrhagic lesion which corresponds venous territory.

## Discussion

Pregnancy related hypercoaguable state may exacerbate the disease process of antiphospholipid syndrome and thrombosis may be seen more common. Thrombosis occurs usually in late pregnancy and puerperium but rarely during the first trimester of pregnancy. The prognosis is not encouraging, in about one third of cases, intracranial venous thrombosis has a fetal outcome. In this case mother survived with no sequelae under anticoagulation therapy, but fetus was lossed at 18 weeks of gestation. It was reported that fetal death is more characteristic type of loss experienced in women with antiphospholipid antibodies. Plasental insufficiency resulting in fetal death is an important clinical and histological feature of antiphospholipid syndrome as evidenced by meconium aspiration and extensive placental infarcts at the autopsy of our case.

In summary, thrombotic complications of pregnancy may occur in first trimester and not always fatal or results in sequelae. Presence of antiphospholipid antibodies should be investigated in women presenting with thrombosis and fetal loss especially in early pregnancy. Counseling about risks during the pregnancy and subsequent pregnancies should be provided to patient.

Erken Gebelikte Iki Komplikasyona Yol Açan Antipospolipid Sendromu: Intrakranial Venöz Sinüs Trombozu ve Fetal Kayıp

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Dural sinüs trombozu gebeliğin ilk trimeslerinde oldukça nadir görülen bir durumdur. Lakat antifosfolipid sendromu saptanan bu olguda gebeliğin onuncu haftasında transvers sinüs trombozu ve onsekizinci haftasında da fetal kayıp gerçekleşmiştir. Özellikle erken gebelik döneminde gelişen tromboz ve fetal kayıp durumlarında antifosfolipid antikorları araştırılmalı ve hasta bu ve bundan sonraki gebeliklerinde karşılaşabileceği riskler konusunda bilgilendirilmelidir.

Anahtar Kelimeler: Antifosfolipid sendromu, Dural sinüs trombozu

## References

- Bick RL, Baker WF Jr. The antiphospholipid and thrombosis syndromes. Med Clin North Am 1994; 78(3):667-84.
- Bryan T, Oshiro, Robert M, Silver, James R, Scott, Huixia Yu, DW, Branch, Antiphospholipid antibodies and fetal death, Obstetric and Gynecology 1996; 87(4):489-93.
- Frank De Wolf, Luis O. Carreras, Philippe Moerman, Jos Vermylen, Andre Van Assehe, Marcel Renaer, Decidual vasculopathy and extensive placental infarction in a patient with repeated thromboembolic accidents, recurrent fetal loss, and a lupus anticoagulant. AM J Obstet Gynecol 1982; 142:829.
- Walter K, Imai, F, Richard Everhart, Jr, and Joe M. Sanders Jr. Cerebral venous sinus thrombosis: Report of a case and review of the literature. Pediatrics 1982; 70(&):965-70.