

Pregnancy and Lymphoblastic Lymphoma (A Case Report)

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Our aim is to report a pregnant woman with lymphoblastic lymphoma and to discuss the current literature for the diagnosis and therapy of this comorbidity. Lymphoblastic lymphoma (non-Hodgkin lymphoma) is a highly uncommon but serious condition during pregnancy. With multidisciplinary management (Obstetrics, Pediatrics, Hematology and Anesthesia) outcomes are generally good for mother and child, but consequences depend on the stage of the disease, its progressive nature and pregnancy. (*Gynecol Obstet Reprod Med* 2005; 11:135-136)

Key Words: Lymphoblastic lymphoma, Chemotherapy

This patient was consulted to Perinatology Department. Obstetric ultrasound evaluation was consistent with 26 weeks gestation with absolutely normal findings. Together with Oncology Department, we decided to treat the patient with 3 courses of CHOP (Cyclophosphamide, Doxorubicine, Vincristine and Prednisone) therapy. We planned delivery after chemotherapy. After second course of chemotherapy, when the gestational week was 33, the labor began and a fetus weighting 2130 gr. with 10/10 APGAR was delivered by cesarean section. The newborn was referred to the Neonatology Service with wet lung for a few days and discharged as a healthy baby. Postoperative third day, the patient had difficulty of speaking and she was consulted to the Neurology Department. Cranial MRI showed no cerebral involvement but lymphoblastic cells were documented in lumbar puncture and intrathecal chemotherapy was initiated. However in the following two days, the patient died from intracranial dissemination resistant to chemotherapy.

Discussion

Lymphoblastic lymphoma is the fourth most common malignancy seen during pregnancy.¹ It is not believed to affect pregnancy and pregnancy does not cause a tendency for this malignancy. However a few exceptions have been reported. Lymphoblastic lymphoma can sometimes affect the placenta and transmission to the fetus is possible.² Lymphoblastic lymphoma can be seen in many organs during pregnancy and because of its nonspecific symptoms, the diagnosis is usually delayed. Extensive staging is required for non-Hodgkin lymphomas using the Ann-Arbor classification system. Lumbar puncture should be carried out in patients

suspected to have high grade lymphoma with symptoms of neurologic involvement.³ Our patient was in stage VI-B.

Low grade lymphoma shows slow progress and with a close monitorization of fetus and mother chemotherapy can be planned. In some cases in which there is a threatening situation for the mother's life, therapeutic abortion is recommended. Our patient was consulted to the Obstetrics clinic when her pregnancy was on 26th week and termination was not possible. Besides, there are several reports on administration of cytotoxic therapy in the first 3 months of pregnancy which resulted with healthy newborns.⁴ Nonetheless, lymphoblastic lymphoma has an aggressive nature during pregnancy, Burkitt lymphoma is usually lethal. There are reports in the literature confirming that its nature can also be aggressive during the postpartum period.⁵

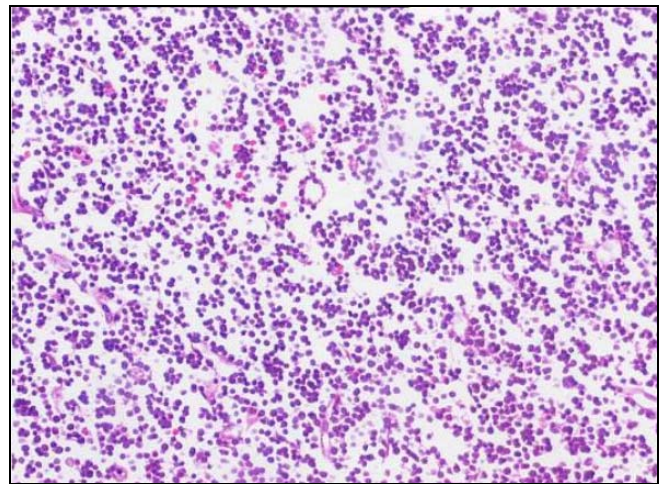


Figure 1. Axillary lymph node biopsy

According to Ward and Weiss' report including 42 cases, 29 patients' therapy resulted with death, 11 of them with remission, and 2 patients had symptoms continuation of which ended with death.¹

Avites has reported 16 pregnant woman receiving chemotherapy and 15 healthy newborns.⁶

Cytotoxic therapy can be dangerous and may have mutagenic effects on the fetus but a high portion of the

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patients are reported to have healthy babies. Chemotherapy may also result with thrombocytopenia and neutropenia in a fetus when used in the late third trimester.

Although lymphoblastic lymphoma is the fourth common malignancy during pregnancy, still there is not a consensus on the standard protocol for the treatment of this disease during pregnancy. According to our opinion, the therapy should be individualized and multidisciplinary management (Obstetrics, Pediatrics, Hematology and Anesthesia) should be carried out for these patients.

References

1. Ward FT, Weiss RB: Lymphoma and pregnancy .Semin Oncol. 1989; 16:397.
2. Tsusimura T, Matsumatu K, Aozasa K: Placental involvement by maternal NHL. Arch Pathol Lab Med 1993; 117:325.
3. Sweet DL, Kinzie J: Consequences of RT and antineoplastic therapy for fetus: J Reprod Med 1976; 17:241.
4. Doll DC, Ringerberg S, Yarbrow JW: Management of cancer during pregnancy Arch Intern Med 1998; 148:2058.
5. Steiner-Salz D, Yahalom J, Samuglow A, Polliack A: Non-Hodgkin's lymphoma associated with pregnancy A report of six cases with a review of the literature Cancer 1985; 56:2087.
6. Aviles A, Diaz-Magueo JC, Torrasu Non-Hodgkin's lymphoma and pregnancy CA 1990; 33:194.