The Lyme Disease Network
Conference Abstract

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<th>Title:</th>
<th>Disseminated Lyme Disease and Pregnancy</th>
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**Abstract:**
The relationship between Lyme disease and pregnancy is not clear. Limited data exists about Lyme disease contracted during pregnancy and its effects on fetus. There is virtually no data about the effects of disseminated Lyme disease on pregnancy. There is no consensus on the clinical management of Lyme disease during pregnancy. The objective of this prospective, open-ended study was to determine the management of disseminated Lyme borreliosis (LB) during pregnancy.

**Methods:**
Clinical and laboratory information regarding LB and pregnancy was collected from mothers and newborns. Maternal and fetal serum, urine, and placenta samples were analyzed at the BBI-NACL using ELISA, Western blot, PCR, culture, and antigen detection tests.

**Results:**
A cohort of nine patients living in LB endemic areas was analyzed. Five patients (55%) had history of EM, 6 patients (66%) had laboratory confirmation later in the course of the disease. LB was contracted 2 to 96 months (median 53.8 months) before conception. Median length of treatment before conception was 5.5 months. Seven women were symptomatic at the time of conception, 6 of whom received antibiotics through the entire pregnancy. Except for one case, all test results were negative. On the follow-up (4 to 16 months), all but one infant had no complications. Antibiotic therapy was continued in 4 women after delivery, whose symptoms worsened. Seven women, 5 of which were symptomatic, breastfed.

**Conclusion:**
No case of transplacental transmission was documented using serological and PCR assays. Histopathological studies need to be applied. Women who are symptomatic at the time of conception are more likely to be treated for the entire pregnancy. Breastfeeding by LB symptomatic mothers has no harmful effect on the infant. More studies are needed to develop further diagnostic and treatment recommendations.

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