



BEHAVIOR OF MULTIPLE SCLEROSIS DURING PREGNANCY AND AFTER DELIVERY

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Introduction: Multiple Sclerosis (MS) most commonly affects women during childbearing years. Therefore, it is important for health care providers to know more about the behavior of MS during pregnancy to provide appropriate counseling. Recent studies have shown significant decreases in the relapse rate during the third trimester of pregnancy and an increased risk of exacerbations in the three months after delivery. (1) It is believed that the reason for pregnancy protection from MS relapses is linked to high protective levels of estrogens as shown in a recent trial with exogenous estrogens (2). During the postpartum period, various regimens have been studied to decrease the relapse rate including the use of IV steroids right after delivery, showing a decreased relapse rate in the first trimester post-delivery compared with placebo (3). IVIG also showed benefit in reducing postpartum relapses within the first 6 months postpartum (4).

Objectives: To assess frequency of relapses during pregnancy, the first year after delivery and the relationship between relapses and treatment in a large, academic MS clinic.

Materials and Methods: Prospective and retrospective study in progress. Fifty women with MS that are or were pregnant and were seen at the MS clinic from January 2000 to December 2006 were included. We reviewed medical records or interviewed the patient.

Results: 50 subjects participated in the study. There were a total of 98 pregnancies reported from study sample. The average age at first pregnancy was 28 years old. The youngest woman to become pregnant for the first time was 17 and the oldest was 37 years old respectively. 52% of women became pregnant for the first time after being diagnosed with MS. Of the total pregnancies (fig 1), 74% were live births; 61% vaginal, 38% C-section (fig.2); 18% of the pregnancies were terminated or ended in miscarriage; and 7% were currently pregnant. 82% of women breastfed their child. From the total number of pregnancies there was evidence of relapses in 10% of them with 66% of the relapses happening in the first two trimesters (78% were receiving immunomodulatory drugs before becoming pregnant). About 60% of the pregnancies received IV steroids postpartum. 36% of the pregnancies that received IV steroids prophylaxis had at least one relapse during the year after delivery in comparison with 59% of the pregnancies that did not receive steroid prophylaxis during the postpartum (Figure 3).

Fig. 1. Distribution of cases.

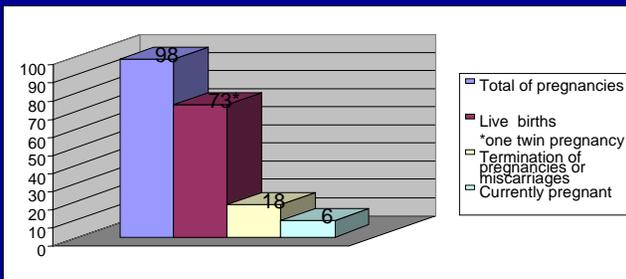


Fig.2 Type of delivery and breastfed percentage

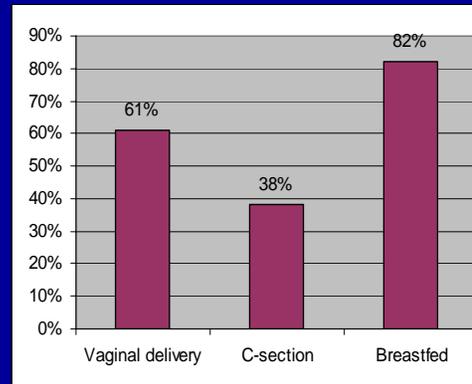
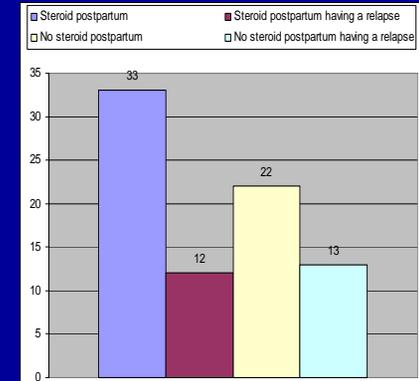


Fig.3 Postpartum steroids and relapses up to a year from delivery.



Conclusions: We found a higher percentage of women with MS requiring C-section in comparison with the general population. Nursing mothers prefer to wait at least a couple months before restarting therapy, because they want to breastfeed their babies (82% of the time). Postpartum relapses were 23% less common in women receiving prophylactic postpartum steroids compared to those who did not. Since the majority of MS patients are women and are diagnosed in their reproductive age, we need to understand more about the behavior of MS in pregnancy and more importantly after delivery, reducing the risk of relapses in the postpartum period.

References:

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2. Alonso A, et al. Arch Neurol 2005; 62
3. De Seze, et al. Multiple Sclerosis 2004;10(5)
4. Orvieto R, et al. European Journal Obs Gyn 1999;82

