

Pregnancy outcomes after exposure to interferon beta: a register-based cohort study among women with MS in Finland and Sweden

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Objectives



Our aim was to estimate and compare the prevalence of adverse pregnancy outcomes among pregnant women with multiple sclerosis (MS) exposed to interferon beta (IFNB) and among women with MS unexposed to any MS disease-modifying drug (MSDMD).



Methods

This cohort study used Finnish (1996–2014) and Swedish (2005–2014) national register data. Women with MS having IFNB dispensed 6 months before or during pregnancy as the only medication were considered as IFNB exposed (only IFNB-exposed), whereas women with MS unexposed to any MSDMD were considered unexposed (MSDMD-unexposed).

Prevalence was described and compared using log-binomial or logistic regression and adjusted for potential confounders including maternal age and comorbidity.

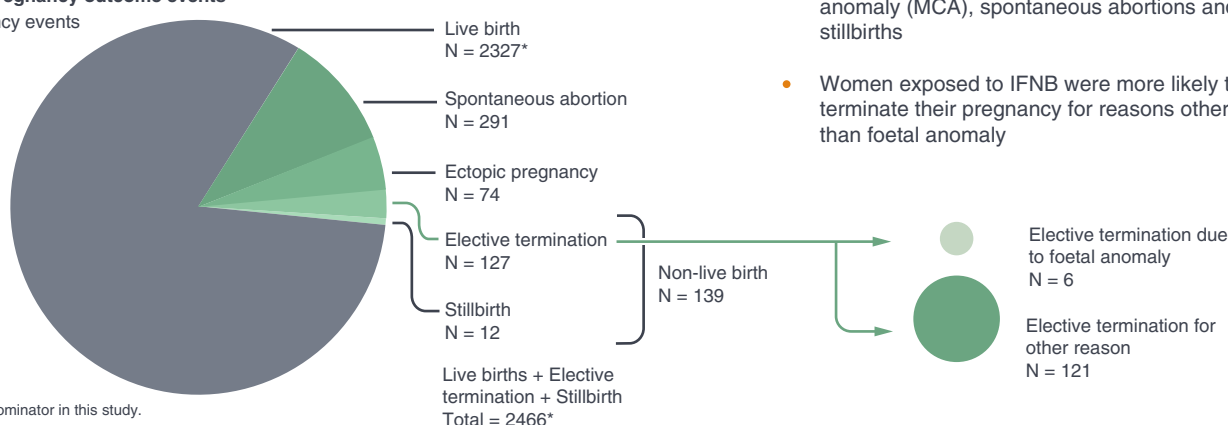


Results

- Among 2831 pregnancies, 2.2% of the only IFNB-exposed women and 4% of MSDMD-unexposed women had serious adverse pregnancy outcomes
- After adjustments, the prevalence of serious adverse pregnancy outcomes was lower among IFNB-exposed compared with MSDMD-unexposed
- IFNB exposure did not increase prevalence of individual outcomes, including Major congenital anomaly (MCA), spontaneous abortions and stillbirths
- Women exposed to IFNB were more likely to terminate their pregnancy for reasons other than foetal anomaly

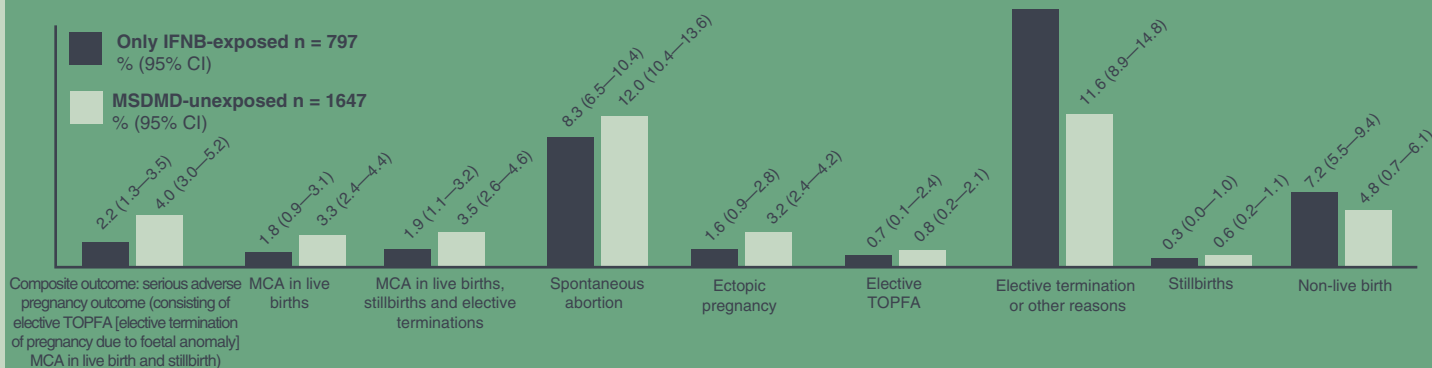
Included pregnancy outcome events

All pregnancy events
N = 2831*



* Used as denominator in this study.

Prevalence of adverse pregnancy outcomes in pregnancy events of women with MS exposed to only IFNB compared to those unexposed to any MSDMDs.



Conclusion

In this large cohort study, no increase in the prevalence of adverse pregnancy outcomes was observed in women with MS exposed to IFNB compared with MS patients unexposed to any MSDMDs. This study together with other evidence* led to a change in the labels of IFNB products in September 2019, despite very limited data on second and third trimester exposure. Now, in many countries in Europe, IFNB use may be considered during pregnancy if clinically needed.

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