Disease-modifying drug treatment before, during, and after pregnancy in women with multiple sclerosis and a live birth

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INTRODUCTION

Multiple sclerosis (MS) is a lifelong, often chronic inflammatory disease of the central nervous system that affects the body’s ability to transmit messages between the brain and the rest of the body. While there is no cure for MS, there are treatments available that can help manage symptoms and slow disease progression.

OBJECTIVES

• To evaluate DMD treatment before, during, and after pregnancy in women with MS
• To examine rates and timing of DMD initiation during three time periods: pre-pregnancy, pregnancy, and post-pregnancy

METHODS

This was a retrospective administrative claims database study using IMS Health (Healthcare Data Solutions) Adjudicated Claims data from January 1, 2006, to June 30, 2015.

• The database contains comprehensive, adjudicated, pharmacy claims data including a complete inventory of patients’ prescriptions, hospital claims, and outpatient medical claims.
• The database contains priority of commercial/Prefers Provider Organizations plans and can thus under-represent the patients on Medicaid/Medicare or patients on commercial plans (i.e., the population aged -18 years).

Study population

Patients were required to have at least one encounter with a diagnosis of MS (International Classification of Diseases, Ninth Edition–Clinical Modification [ICD-9-CM] code 332.80 or 332.81) in the US, and aged 18-84 years at the index date.

Women with MS were included if they had at least one encounter with a diagnosis of pregnancy or a pregnancy-related procedure (e.g., ICD-9-CM and Current Procedural Terminology code) in the US, as of the index date (June 30, 2014).

Continuous eligibility was required from the pregnancy diagnosis minus 1 year to the delivery date. Women with MS were required to have a live birth procedure code to be included in the live birth cohort.

For the analysis of DMD initiation post live birth, women were required to have no DMD treatment before or during the three trimesters (6–9 months, 9–12 months, and 0–29 days) post partum.

RESULTS

Overall, the proportion of women with MS and a live birth who received DMD treatment was 72.6% versus 12.4% respectively.

The proportion of those receiving DMD treatment was greater in women with MS and a live birth who experienced at least 1 relapse in the year after pregnancy compared with women not exposed to DMD treatment.

CONCLUSIONS

• Per our knowledge, this is the first claims database study to evaluate DMD treatment in women with MS before, during, and after pregnancy.

• The proportion of women with MS and a live birth receiving DMD treatment was low and declined during the pre-pregnancy and pregnancy periods.

• In women who did not receive DMD treatment in the third trimester, approximately one-quarter of women received DMD treatment in the year after pregnancy; the proportion initiating treatment was greater in women with prior exposure to DMDs in the pre-pregnancy period.

• Claims data can be a valuable resource for examining a variety of health services research questions.

REFERENCES


ACKNOWLEDGMENTS

The authors thank EDC Laboratories, New York, NY, USA (supported by EMD Serono, Inc.), for the statistical analyses. The authors also thank members of the Multiple Sclerosis Collaborative Research Group for their input on the manuscript.

DISCLOSURES

The authors have declared no conflicts of interest.

Presented at the 31st Annual Meeting of the Consortium of Multiple Sclerosis Centers (CMSC); May 24–27, 2017; New Orleans, LA, USA.