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The Effect of Medication Adherence on the Disease Course in Pregnant Women with Inflammatory Bowel Disease

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Introduction

Medical therapy to maintain disease remission is important in pregnant women with inflammatory bowel disease (IBD), as disease flares can predispose adverse materno-fetal outcomes. However, women with IBD are more concerned about medication exposure on their newborn during pregnancy, and often discontinue their medications.

Objectives and Approach

We assessed the rate of disease flare on medication adherence pattern during pregnancy for women with IBD. Validated case definition was used to identify women with IBD from the Albertan's hospitalization, emergency room, and physician claims databases (2010-2016). Pharmaceutical Information Network provided the dispensed medications. Adherence to medication was defined by medical possession ratio (MPR)$\geq$0.8. Women with two consecutive prescriptions and MPR$\geq$0.8 during pre-conception were included. Disease flare was defined by $\geq$1 hospitalization or emergency visit for IBD, or $\geq$1 prescription for steroids/rectal therapy. Chi-square tests and log binomial regression were used; covariates included age, drug class, and IBD subtypes.

Results

Of the 370 women identified with IBD, 170 (45.9%) women were adherent to maintenance IBD medications in the one year prior to pregnancy. During pregnancy, 47 (27.6%; 95% CI: 21.4% to 34.9%) women, who demonstrated adherence in the pre-conception period, discontinued or were not adherent to their IBD medications, and 67 (39.4%; 95% CI: 32.3% to 47.0%) women had a disease flare during pregnancy. There was no significant difference between adherence to medication during pregnancy and a disease flare during pregnancy (p=0.38). In comparing women who were not adherent or discontinued their medication to those that were adherent, the adjusted relative risk ratio for a disease flare during pregnancy was 1.22 (95% CI: 0.81 to 2.04).

Conclusion/Implications

The rate of disease flare during pregnancy was not significantly different for women with IBD that were adherent or not-adherent to their IBD medications during pregnancy. Future analysis will assess the rate of disease flare on medication adherence pattern prior to pregnancy.

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