ACPA-Negative RA Up in First Postpartum Year

VITALS

Major Finding: During the year following giving birth, women had a statistically significant, 2.4-fold increased risk of incident ACPA-negative rheumatoid arthritis, compared with nulliparous women.

Data Source: Case-control study of 1,205 Swedish women enrolled in the Epidemiological Investigation of Rheumatoid Arthritis study during 1996-2006.

Disclosures: Dr. Bengtsson said that she had no relevant financial disclosures.

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FROM THE ANNUAL EUROPEAN CONGRESS OF RHEUMATOLOGY

LONDON – Women who give birth to a child face a twofold increased risk of incident anticitrullinated peptide antibody–negative rheumatoid arthritis, compared with nulliparous women, but they have no increased risk for developing ACPA-positive disease, based on results from a Swedish epidemiologic study.

The finding is consistent with a report last year from a Norwegian study that women face about a twofold increased risk for incident rheumatoid arthritis (RA) during the first 2 years after giving birth to a child, compared with their RA risk 2-4 years post partum (Ann. Rheum. Dis. 2010;69:332-6).The reason why the new analysis, which included more than 1,200 cases and controls, showed a different relationship between partum and the onset of ACPA-positive RA and ACPA-negative RA remains unclear, according to Camilla Bengtsson, Ph.D.

"Why there is only an association with ACPA-negative disease, and which biological mechanisms are involved remains to be elucidated," said Dr. Bengtsson, a researcher at the Karolinska Institute in Stockholm. The way in which this finding might apply to practice also remains unclear, she added.

Dr. Bengtsson's analysis failed to show an increased incidence of any form of RA in women who were more than a year out from their delivery.

The study used data and blood specimens from Swedish women aged 18-50 years who were enrolled in the Epidemiological Investigation of RA (EIRA) study during 1996-2006. Among the women with incident RA enrolled in EIRA, 547 (95%) agreed to participate and provide blood specimens, and among the control women in the study, 658 (81%) provided blood. The analysis divided the cases and controls into subgroups based on their partum status. The 547 women with new-onset RA included 360 who had given birth and 187 who had not. The parous women included 226 with ACPA-positive RA and 134 with the ACPA-negative form. Among the nulliparous women with RA, 127 had the ACPA-positive form and 60 were ACPA negative.

Among the controls with no RA, 431 had given birth and 227 had never given birth.

The case-control analysis showed that among all women with incident RA, birth status during the year preceding a new RA diagnosis had no statistically significant relationship with RA onset. However, among women who developed ACPA-negative RA, their risk spiked by a statistically significant, 2.4-fold rate during the year following partum, compared with nulliparous women. In contrast, the incidence of ACPA-positive RA showed no significant relationship to partum status during the preceding year.

Further analysis examined the timing between delivery and onset of ACPA-negative RA more closely. Again, the analysis showed that, during the year following giving birth, women faced a statistically significant, 2.4-fold elevated risk for incident ACPA-negative RA, compared with nulliparous women. During the 2-10 years following giving birth, the rate of incident ACPA-negative RA dropped to a 50% higher risk, compared with nulliparous women, but this difference was not considered statistically significant. And women more than 10 years out from their most recent delivery had a risk for incident ACPA-negative RA identical to the nulliparous women, Dr. Bengtsson reported. ■