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Reply

Dear Editor,

We have reviewed the issues and arguments presented by Wang et al.[1] In fact, we have well-clarified these issues in "Discussion" section of our original article.[2]

The aim of our study was to investigate the expression of maternal antineuronal antibodies and their role in childhood autism spectrum disorders (ASDs). Our results are consistent with those of other investigators who identified the presence of antibodies that bind to the brain in mothers with ASD offspring.[3,4] Thus, we further believe that the aim and the results of our study are relevant to the title.

We mentioned in our article that we were only able to measure autoantibodies in maternal serum at a single point after pregnancy, so it is difficult to prove whether the antibodies we measured were present earlier or later following pregnancy. This limitation does not rule out the possibility that some of these maternal autoantibodies had a role in autism, because maternal antibody-mediated abnormalities in brain development may not be detected until months to years after birth.[5] In addition, age-dependent decline in antibody levels is not commonly observed in autoimmune disorders.[6] Therefore, detection of autoantibodies years after pregnancy does not preclude the possibility of their existence before or during pregnancy. Zimmerman et al[7] found that specific patterns of antibody reactivity were present in the sera of mothers of autistic children, from 2 years to 18 years after the birth of their affected children.

ASD is not a common disease. In a systematic review of epidemiological surveys of autistic disorder and pervasive developmental disorders worldwide,[8] the median global prevalence estimate of ASDs was 62/10,000. Such a low prevalence rate and the long latency period between exposure to risk factor (autoantibodies) and development of ASD[5] necessitated a case−control design. Despite that, we concur with Wang et al[2] that a cohort study is suitable to determine the association between maternal antineuronal antibodies and ASD. However, cohort studies have certain limitations including their time-consuming nature, elevated cost, and typical loss of follow-up. In our article, we recommended that a prospective cohort study of subsequent offspring born to mothers with positive serum paraneoplastic antibodies who already have one child, with or without ASD, will resolve this issue.

Thank you

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