

THE RELATION BETWEEN CESAREAN SECTION AND AUTISM SPECTRUM DISORDER

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Autism Spectrum Disorder (ASD) is a neurobiological developmental condition that, despite extensive research, still presents poorly understood mechanisms. It is characterized by impairments in social interaction, along with patterns of restricted interests and repetitive behaviors. In recent decades, the increasing prevalence of ASD has raised global concerns. While the genetic influence on ASD is significant, evidence points to the contribution of various pre- and perinatal factors in its development. Among the various gestational and obstetric risk factors associated with ASD, there is growing concern related to the association between cesarean sections and the development of ASD, especially in a global context of increasing cesarean rates. Thus, this study aims to describe the main relationships between the diagnosis of autism spectrum disorder and children born via cesarean section. This is an integrative literature review conducted through searches in the databases of the Virtual Health Library (BVS Saúde), Scientific Electronic Library Online (SciELO), and ScienceDirect, using Health Science Descriptors (DeCS/MeSH) and the following Boolean operators: "autism" AND "cesarean." The search was conducted in October 2023. Inclusion criteria included full original articles, between the years 2013-2023, in Portuguese, English, or Spanish. Exclusion criteria encompassed texts unrelated to the research topic, those that did not address the research question, as well as editorials, review articles, and case reports. Nine articles were selected, which show that various factors, such as advanced maternal age, cesarean delivery, exposure to general anesthesia, pregnancy complications, and other perinatal conditions, are associated with an increased risk of Autism Spectrum Disorder (ASD) in children. Cesarean section, in particular, is a significant risk factor, although the reasons and direct mechanisms of this association have not been identified, due to the absence of defined mechanisms for autism spectrum disorder. Additionally, exposure to pre- and intrapartum complications can elevate the risk. Perinatal care and early interventions are crucial in reducing the incidence of ASD. However, the individual contribution of each factor is relatively small, and the recent increase in ASD is likely influenced by a combination of factors. In summary, it was evidenced that cesarean section is a risk factor for autism spectrum disorder; however, it cannot be defined as the primary cause since ASD is related to multifactorial causes. Therefore, healthcare professionals should adopt a cautious approach when planning childbirth, even when there are no apparent high health risks associated with vaginal delivery. It is important to inform mothers about the pros and cons of cesarean section. This study was limited by the scarcity of articles addressing the relationship between cesarean section and Autism Spectrum Disorder.

Keywords: Autism; Cesarean Section; Risk Factors.

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