

Cesarean section-born children may face higher risk of infection-related hospitalisation

Study suggests cesarean sections may pose greater health risks to children than previously known

Children born via cesarean section may be more likely to be hospitalised for infection during early childhood. A study published in *PLOS Medicine* by Jessica Miller at the University of Melbourne, Australia and colleagues suggests that compared to vaginally-born children, cesarean-born children may have a higher risk of infection-related hospitalization for up to five years of age.

The global proportion of cesarean section births has nearly doubled since 2000, yet the relationship between mode of birth and common childhood infections beyond the neonatal period is not well understood. To assess the association between mode of birth and infection-related hospitalisation, researchers analysed hospital data of 7,174,787 singleton children in Denmark, Scotland, England, and Australia born between January 1, 1996 and December 31, 2015. Children born during this period were followed from their birth-related hospital discharge date until an infection-related hospitalisation, death, emigration, 5th birthday, or end of the study period. While the researchers were able to observe an association between birth by cesarean section and an increased risk of infection, the study was limited in that vaccination data were unavailable, which could potentially confound the results.

Compared with those delivered vaginally, cesarean section-born children had an approximately 10% greater risk of infection-related hospitalisation up to five years of age. Although the researchers were able to observe a relationship between mode of birth and risk of infection-related hospitalisation, future studies are needed to determine whether differences in early microbial exposure by mode of birth may play a mediating role in varying infection risks.

According to the authors, “ Infection is the leading cause of early childhood hospitalisation and this potential risk should be considered when discussing obstetric management, especially if vaginal birth is clinically safe and appropriate”.

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