Does cesarean delivery prevent cerebral palsy or other neurologic problems of childhood?

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Children with cerebral palsy often have other neurological impairments such as epilepsy, visual impairment, hearing loss and intellectual disability. Around half of children with cerebral palsy have normal or high intelligence, and the degree of physical disability varies widely. Most will live full lives. But some are so profoundly affected they will never walk or speak and will be wheelchair-dependent. They will often be in chronic pain. So while it's true that problems in labour can cause cerebral palsy, they rarely act alone and can only be reasonably identified in one in ten cases. Preventing Cerebral Palsy. Alan Handyside, Wellcome Images. Over the past 20 years, researchers have made important progress in the search for ways to prevent or ameliorate cerebral palsy. (Medical Xpress)—Caesarean deliveries do not prevent children from developing cerebral palsy, despite long-held medical and community beliefs about the causes of cerebral palsy, according to new research led by the University of Adelaide. In the biggest study of its kind, the Australian Collaborative Cerebral Palsy Research Group, based in the University's Robinson Institute, has analysed all published studies involving more than 3,800 cerebral palsy cases and almost 1.7 million healthy children. The findings, to be published in the December issue of the prestigious journal Obstetrics & Gynecol. 1994 Sep;84(3):482; author reply 482-3.

Abstract

OBJECTIVE: To determine whether cesarean delivery can lead to fewer childhood neurologic problems. DATA SOURCES: We reviewed English language articles published between 1969 and 1993, obtained via MEDLINE search of the heading “delivery, abdominal.” Bibliographies of books chapters and articles about cerebral palsy and other childhood neurologic disorders were also searched. METHODS OF STUDY SELECTION: We sought articles that dealt with vaginal versus cesarean delivery and the following outcomes: cerebral palsy, abnormal neurologic development, neonatal seizures, and neonatal intraventricular hemorrhage. Ten relevant studies were identified, only four of which were prospective, and only one of which (involving breech births) was a randomized trial. DATA EXTRACTION AND SYNTHESIS: No study found a significant difference in the rates of cerebral palsy, abnormal neurologic development, and neonatal seizures between those children born vaginally or by cesarean. The severity of handicap of infants born with myelomeningocele was less in those delivered via cesarean. Infants born by cesarean had a decreased risk for developing neonatal brachial plexus palsy. Cesarean delivery of mothers with human immunodeficiency virus (HIV) or with genital lesions and no history of herpes may benefit the infant. CONCLUSIONS: Cesarean delivery can reduce the risk of adverse childhood neurologic outcome for those born with myelomeningocele, and may reduce the rate of brachial plexus palsies and neonatal herpes and HIV infections. However, children born by cesarean have no documented reduced risk of other childhood neurologic problems or cerebral palsy.

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