

Babies born past term associated with increased risk of cerebral palsy

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While preterm birth is a known risk factor for cerebral palsy, an examination of data for infants born at term or later finds that compared with delivery at 40 weeks, birth at 37 or 38 weeks or at 42 weeks or later was associated with an increased risk of cerebral palsy, according to a study in the September 1 issue of *JAMA*.

Cerebral palsy (CP), the most common cause of physical disability in childhood, with limitations that persist throughout life, is characterized by nonprogressive disorders of movement and [posture](#). "One of the strongest predictors of CP is preterm birth, with the risk of CP increasing steadily with earlier delivery. Although risk is lower among term births, about three-fourths of all infants with CP are born after 36 weeks. Within this range of term births, there are few data on the possible association of CP with [gestational age](#)," the authors write.

Dag Moster, M.D., Ph.D., of the University of Bergen, Norway, and colleagues examined the relation of CP risk with gestational age among term and postterm births using the Medical Birth Registry of Norway, which identified 1,682,441 children born in the years 1967-2001 with a gestational age of 37 through 44 weeks and no congenital anomalies. The group was followed up through 2005 by linkage to other national registries.

Of the group of term and postterm children, 1,938 were identified as having [cerebral palsy](#). The researchers found that infants born at 40 weeks had the lowest risk of CP, with a prevalence of 0.99/1,000 births. Risk for CP was higher with earlier or later delivery, with a prevalence at 37 weeks of 1.91/1,000 (90 percent increased risk), a prevalence at 38 weeks of 1.25/1,000 (30 percent higher risk), a prevalence at 42 weeks of 1.36/1,000 (40 percent increased risk), and a prevalence after 42 weeks of 1.44/1,000 (40 percent higher risk).

The authors add that these associations were stronger in a subset with gestational age based on ultrasound measurements, with a gestational age of 37 weeks associated with a 3.7 times higher risk of CP; and 42 weeks, a 2.4 times higher risk. Adjustment for infant sex, maternal age, and various socioeconomic measures had little effect.

"Clinicians typically regard term births (37-41 weeks) as low risk, with the possibility of increased risk with postterm delivery. This standard definition of term does not correspond well with the period of lowest risk for CP in this study or with the weeks when most infants are born. Weeks 37 and 38 seem more to resemble weeks 42 and 43, both in CP risk and in the general likelihood of delivery, leaving 39 to 41 weeks as the optimum time for delivery. If the time of delivery affects CP risk, then intervention at 40 weeks might reduce CP risk, while elective delivery at 37 or 38 weeks might increase it. If infants prone to CP are disrupted in their delivery times, the prevalence of CP would be unchanged regardless of time of delivery," the researchers write.

"Until the biological mechanisms for these patterns of risk in term and postterm births are better understood, it would be hasty to assume that interventions on gestational age at delivery could reduce the occurrence of CP."

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