Medical Xpress

Late-term birth associated with better school-based cognitive functioning

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Better measures of school-based cognitive function were associated with late-term infants born at 41 weeks but those children performed worse on a measure of physical functioning compared with infants born full term at 39 or 40 weeks, according to an article published online by *JAMA Pediatrics*.

Evidence suggests full-term infants have better health and cognitive outcomes in childhood and into adulthood. Late-term gestation (pregnancy) is associated with increased risk of perinatal health complications. But it is unknown what long-term cognitive and physical outcomes are associated with late-term gestation.

David N. Figlio, Ph.D., of Northwestern University, Evanston, Ill., and coauthors analyzed Florida birth certificates linked to Florida public school records for more than 1.4 million singleton births with 37 to 41 weeks of gestation. The authors compared late-term (born at 41 weeks) with full-term (born at 39 or 40 weeks) gestation using three school-based cognitive measures and two physical outcomes (abnormal newborn conditions and physical disabilities noted in the school record).

Late-term infants outperformed full-term infants in all three cognitive dimensions (higher average test scores in elementary and middle school, a 2.8 percent higher probability of being gifted, and a 3.1 percent reduced probability of poor cognitive outcomes) compared to full-term infants. However, late-term infants also had a 2.1 percent higher rate of physical disabilities at school age and higher rates of abnormal

conditions at birth, according to the results.

"In summary, these findings suggest there may be a tradeoff between physical and cognitive outcomes associated with late-term gestation. While late-term gestation was associated with an increase in the rate of abnormal conditions at birth and with worse physical outcomes during childhood, it was also associated with better performance on all three measures of school-based cognitive functioning measures during childhood," the study concludes. "While this article does not constitute a course of action for clinicians, our findings provide useful long-term information to complement the extant short-term data for expectant parents and physicians who are considering whether to induce delivery at full term or wait another week until late term."

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